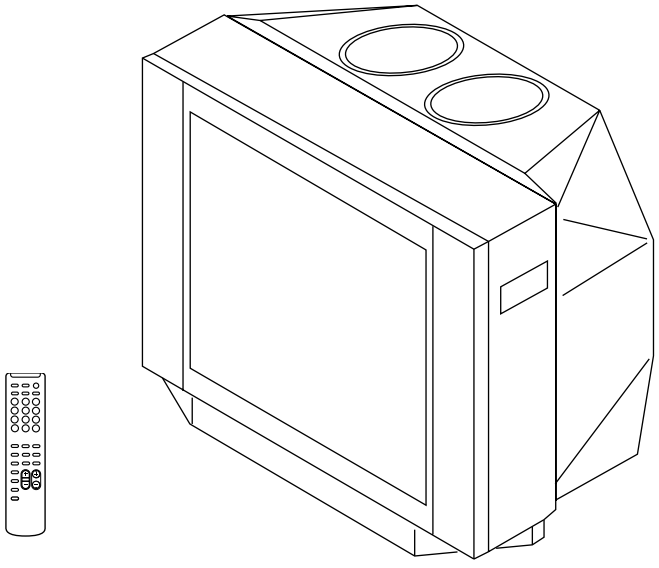
Self Diagnosis
Supported model

SERVICE MANUAL

BG-3S CHASSIS

MODEL	COMMANDER DEST.	CHASSIS NO.	MODEL	COMMANDER DEST.	CHASSIS NO.
KV-XS29N90	RM-914 TAIWAN	SCC-P13J-A			
KV-XS29N93	RM-914 TAIWAN	SCC-P13H-A			



TRINITRON ® COLOR TV

SONY ®

SPECIFICATIONS

			Note
Power requirements	110 V AC, 60 Hz		
Power consumption (W)	Indicated on the rear of the TV		
Television system	M		
Color system	PAL*, PAL 60*, SECAM*, NTSC4.43*, NTSC3.58		* AV IN ONLY
Channel coverage			
M	VHF: 2 to 13 / UHF: 14 to 69 / CATV: 1 to 125		
⅂⌈ (Antenna)	75-ohm external terminal		
Audio output	8W + 8W		KV-XS29N90
	6W + 6W+ 15W		KV-XS29N93
Number of terminal			
(Video)	Input: 3 Output: 1	Phono jacks; 1 V_{P-P}, 75 ohms	KV-XS29N90
	Input: 4 Output: 1	Phono jacks; 1 V_{P-P}, 75 ohms	KV-XS29N93
(Audio)	Input: 3 Output: 1	Phono jacks; 500 mVrms	KV-XS29N90
	Input: 4 Output: 1	Phono jacks; 500 mVrms	KV-XS29N93
(S Video)	Input: 2	Y : 1 Vp-p, 75 ohms, unbalanced, sync negative C : 0.286 Vp-p, 75 ohms	
(Component Video)	Input: 1	Phono jacks; Y : 1 Vp-p, 75 ohms, sync negative C_B :0.7 Vp-p, 75 ohms C_R :0.7 Vp-p, 75 ohms Audio: 500 mVrms	KV-XS29N93
∩ (Headphone)	Output: 1		Minijack
Picture tube	29 inch		
Tube size (mm)	724		Measured diagonally
Screen size (mm)	679		Measured diagonally
Dimensions (w/h/d, mm)	794 × 573 × 517		KV-XS29N90
	794 × 589 × 517		KV-XS29N93
Mass (kg)	51		KV-XS29N90
	54		KV-XS29N93

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

Section	Title	Page
	SELF DIAGNOSIS FUNCTION	4
1.	**GENERAL**	8
2.	**DISASSEMBLY**	
2-1.	3D Speaker Box Removal	24
2-2.	Rear Cover Removal	24
2-3.	Speaker Removal	24
2-4.	Chassis Assy Removal	24
2-5.	F Bracket Removal	25
2-6.	Service Position	25
2-7.	Replacement of Parts	25
2-7-1.	Replacement of Control Button	25
2-7-2.	Replacement of Light Guide	25
2-8.	D3 Board Removal	26
2-9.	Terminal Bracket Removal	26
2-10.	B5 and B7 Boards Removal	26
2-11.	H5 Board Removal	26
2-12.	A and B3 Boards Removal	27
2-13.	Picture Tube Removal	27
3.	**SET-UP ADJUSTMENTS**	
3-1.	Beam Landing	29
3-2.	Convergence	30
3-3.	Focus Adjustment	32
3-4.	G2 (Screen) and White Balance Adjustments	33
4.	**CIRCUIT ADJUSTMENT**	
4-1.	Adjustments with Commander	34
4-2.	Adjustment Method	35
4-3.	Picture Quality Adjustments	40
4-4.	A Board Adjustment After IC003 (Memory) Replacement	40
4-5.	Picture Distortion Adjustment	41
5.	**DIAGRAMS**	
5-1.	Block Diagram	45
5-2.	Frame Schematic Diagram	49
5-3	Circuit Boards Location	53
5-4.	Schematic Diagrams and Printed Wiring Boards	54
(1)	Schematic Diagram of A (1/2) Board	55
(2)	Schematic Diagram of A (2/2) Board	59
(3)	Schematic Diagram of B3 Board	67
(4)	Schematic Diagram of C Board	71
(5)	Schematic Diagrams of F, H5 and J4 Boards	75
(6)	Schematic Diagrams of B5 and VM Boards	81
(7)	Schematic Diagrams of B7 and D3 Boards	87
5-5.	Semiconductors	90
6.	**EXPLODED VIEWS**	
6-1.	Speaker Bracket	93
6-2.	Chassis	94
6-3.	Picture Tube	95
6-4.	3D Speaker	96
7.	**ELECTRICAL PARTS LIST**	97

SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1. DIAGNOSTIC TEST INDICATORS

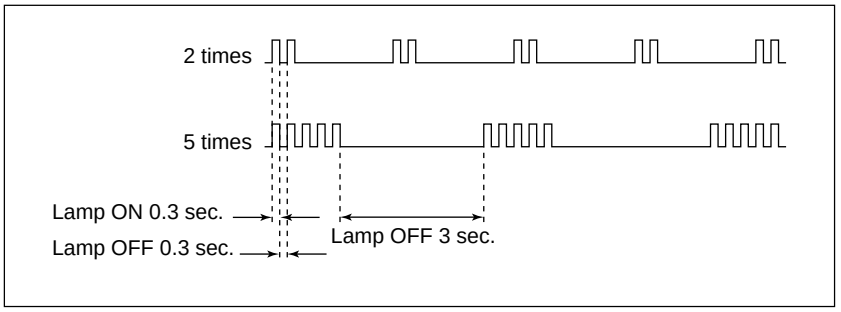
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

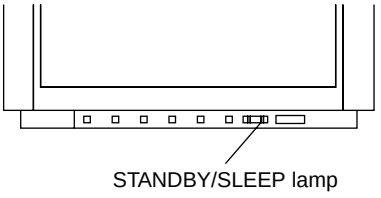
Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	• Power cord is not plugged in. • Fuse is burned out F4601 (F)	• Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
• +B overcurrent (OCP) or overvoltage (OVP) • Vertical deflection stopped • Horizontal deflection overdrive	2 times	002:000 or 002:001~255 003:001~255 004:001~255 at the same time	• H.OUT Q511 is shorted. (A board) • IC701 is shorted. (C board) • -13V is not supplied. (A board) • IC 503 faulty (A board)	• Power does not come on. • Load on power line is shorted. • Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
• White balance failure (no PICTURE)	5 times	005:000 or 005:001~225	• G2 is improperly adjusted. (Note 2) • CRT problem. • Video OUT IC701 is faulty. (C board) • IC301 is faulty. (A board) • No connection A board to C board.	• No raster is generated. • CRT cathode current detection reference pulse output is small.
• Micro reset	—	101:00 or 101:001~225	• Discharge CRT (C Board) • Static discharge • External noise	• Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

Note 1: If a + B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.
The symptom that is diagnosed first by the microcontroller is displayed on the screen.
Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.

2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT





Diagnostic Item	Flash Count*
+B overcurrent/overvoltage Vertical deflection stopped	2 times
White balance failure	5 times

* One flash count is not used for self-diagnostic.

3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

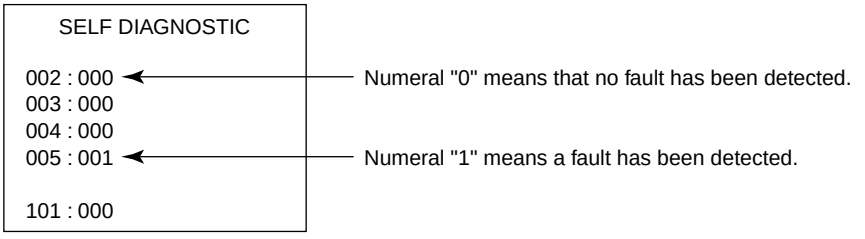
4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurances of failure for confirmation on the screen:

[To Bring Up Screen Test]
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display ➡ channel 5 ➡ Sound volume - ➡ Power ON
⇧
Note that this differs from entering the service mode (mode volume +).

Self-Diagnosis screen display


SELF DIAGNOSTIC
002 : 000
003 : 000
004 : 000
005 : 001
101 : 000
Numeral "0" means that no fault has been detected.
Numeral "1" means a fault has been detected.

5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

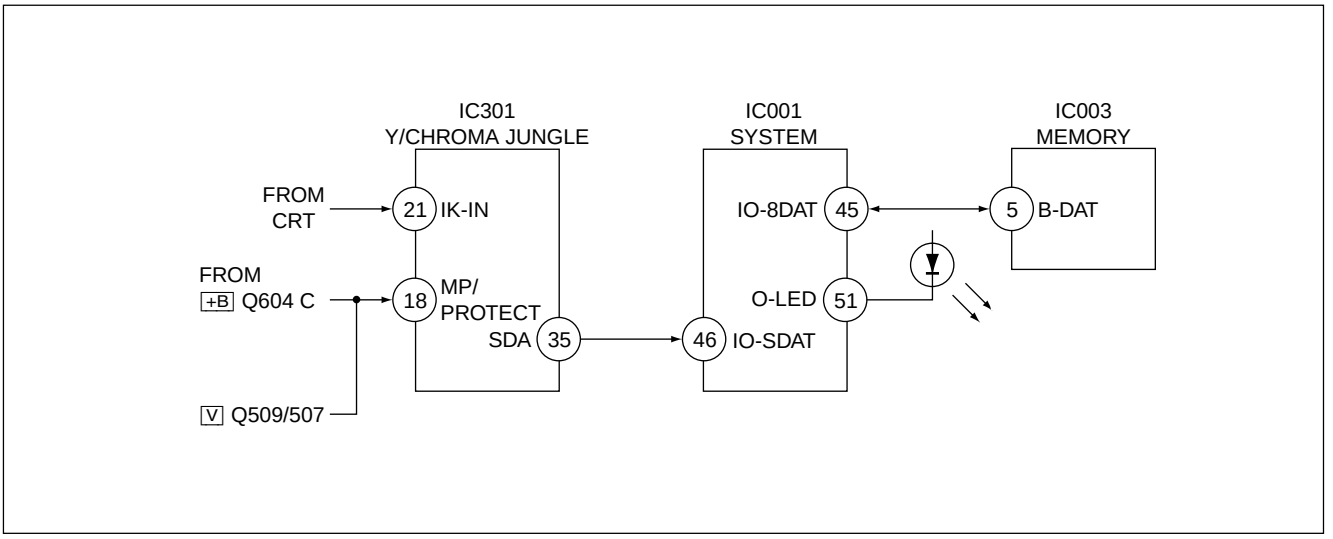
Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

[Clearing the result display]
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel 8 ➡ 0

[Quitting Self-diagnostic screen]
To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

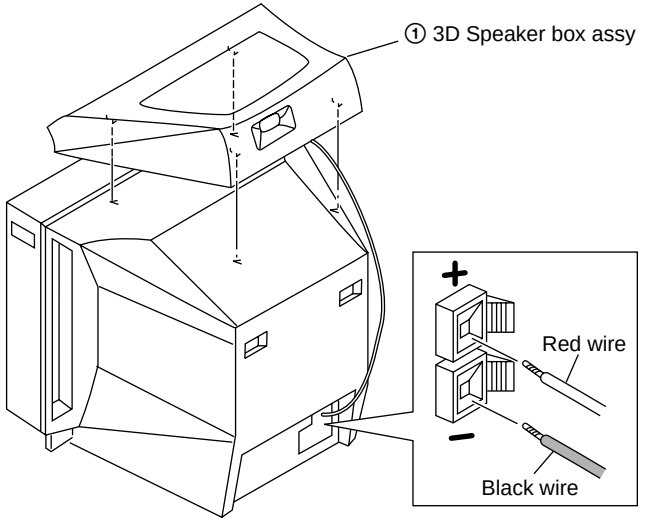
6. SELF-DIAGNOSTIC CIRCUIT



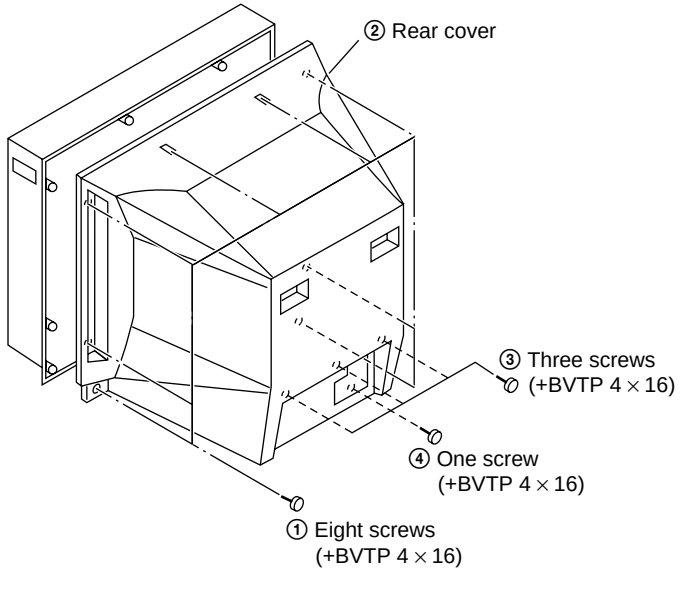
+B overcurrent (OCP)	Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.
Vertical deflection stopped	Occurs when an absence of the vertical deflection pulse is detected by Q509 and IC001 shut down the power supply.
Vertical deflection overcurrent	Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001.
White balance failure	If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. TV will stay on, but there will be no picture. * (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

SECTION 2
DISASSEMBLY

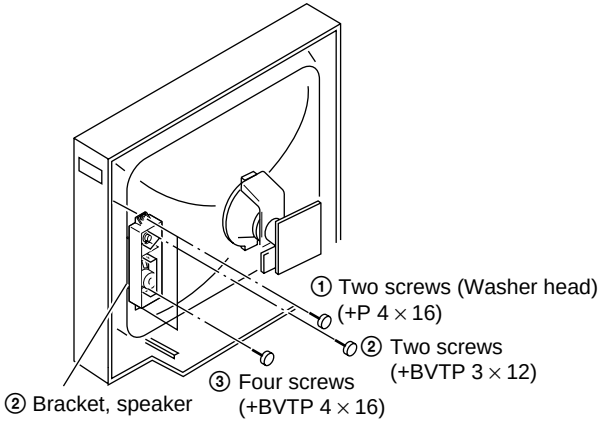
2-1. 3D SPEAKER BOX REMOVAL



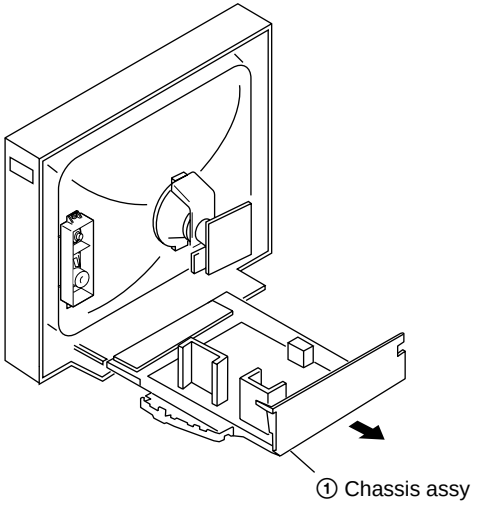
2-2. REAR COVER REMOVAL



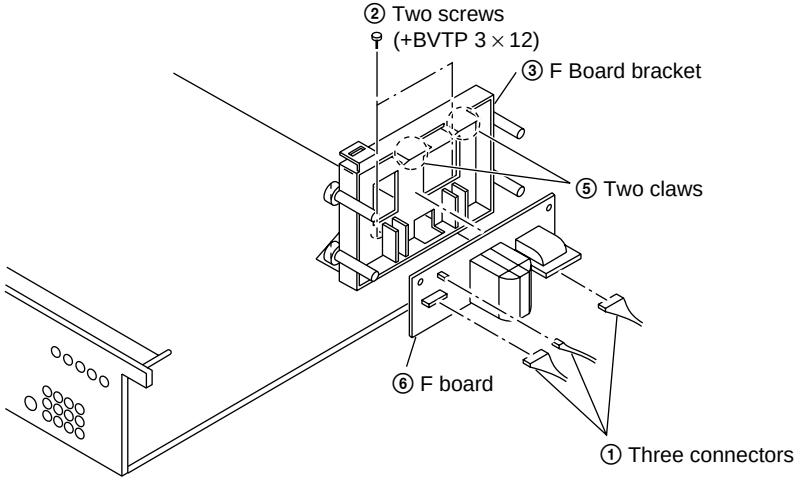
2-3. SPEAKER REMOVAL



2-4. CHASSIS ASSY REMOVAL

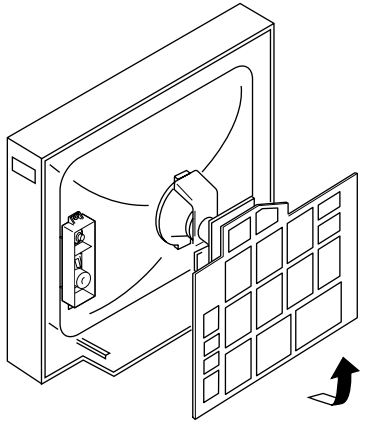


2-5. F BRACKET REMOVAL



2-6. SERVICE POSITION

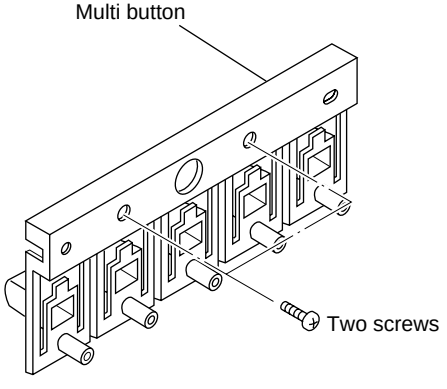
(Note: Remove F Bracket first.)



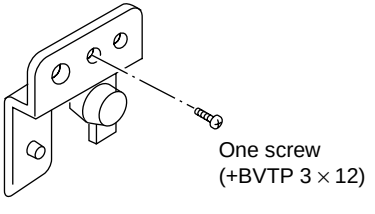
2-7. REPLACEMENT OF PARTS

For replacement of the Control Button and Light Guide, unscrew them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

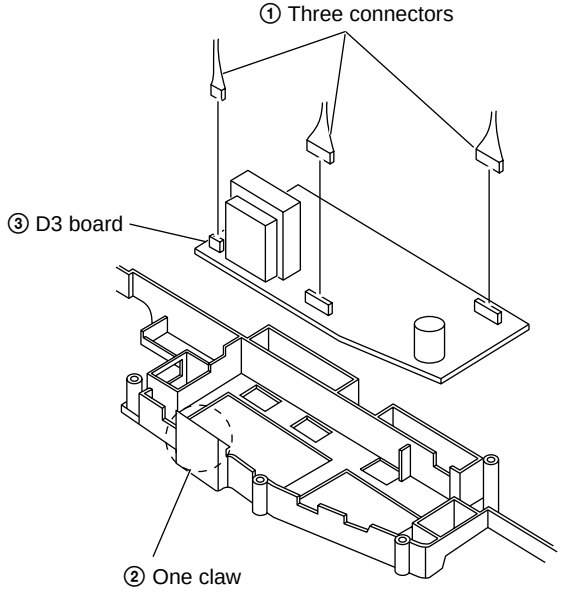
2-7-1. REPLACEMENT OF CONTROL BUTTON



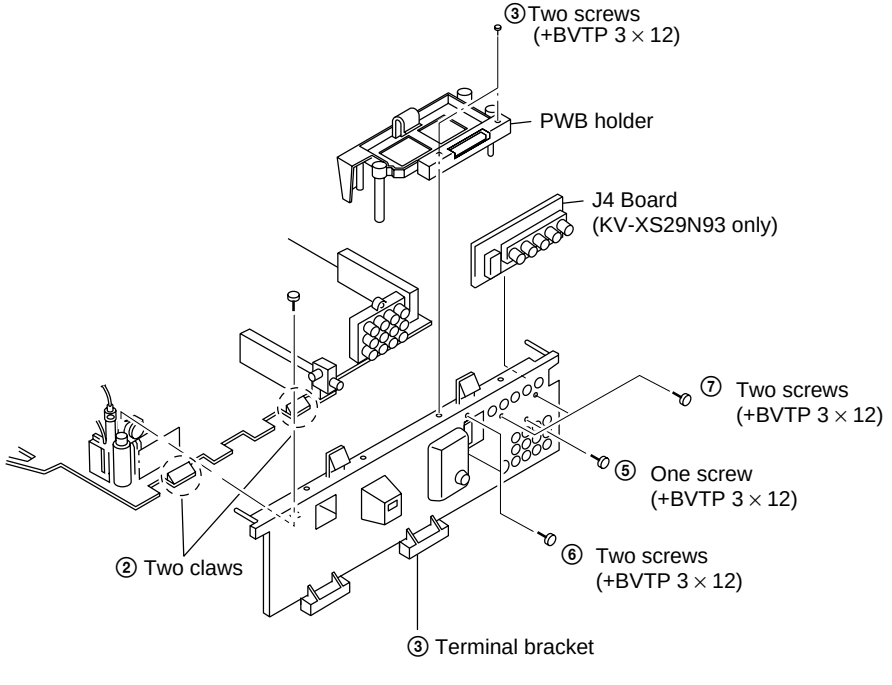
2-7-2. REPLACEMENT OF LIGHT GUIDE



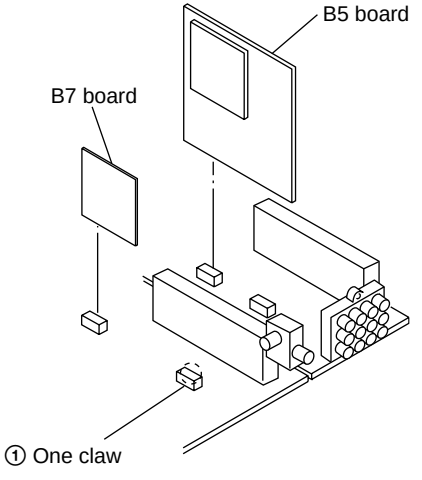
2-8. D3 BOARD REMOVAL



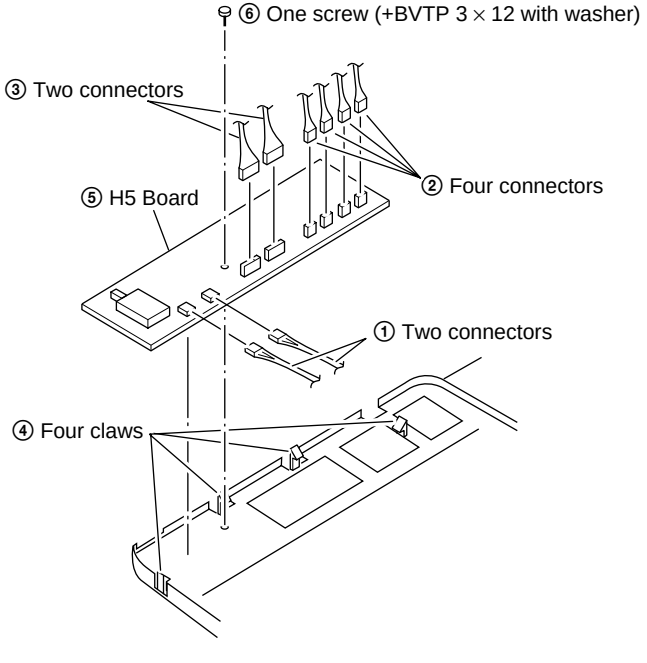
2-9. TERMINAL BRACKET REMOVAL


③ Two screws (+BVTP 3 × 12)
PWB holder
J4 Board (KV-XS29N93 only)
⑦ Two screws (+BVTP 3 × 12)
⑤ One screw (+BVTP 3 × 12)
⑥ Two screws (+BVTP 3 × 12)
② Two claws
③ Terminal bracket

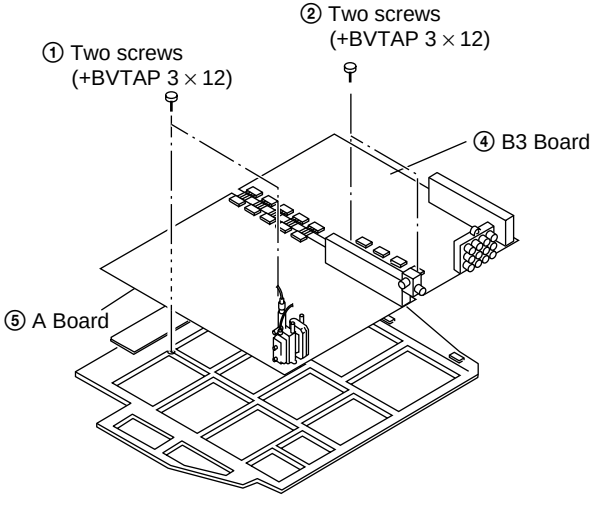
2-10. B5 and B7 BOARDS REMOVAL



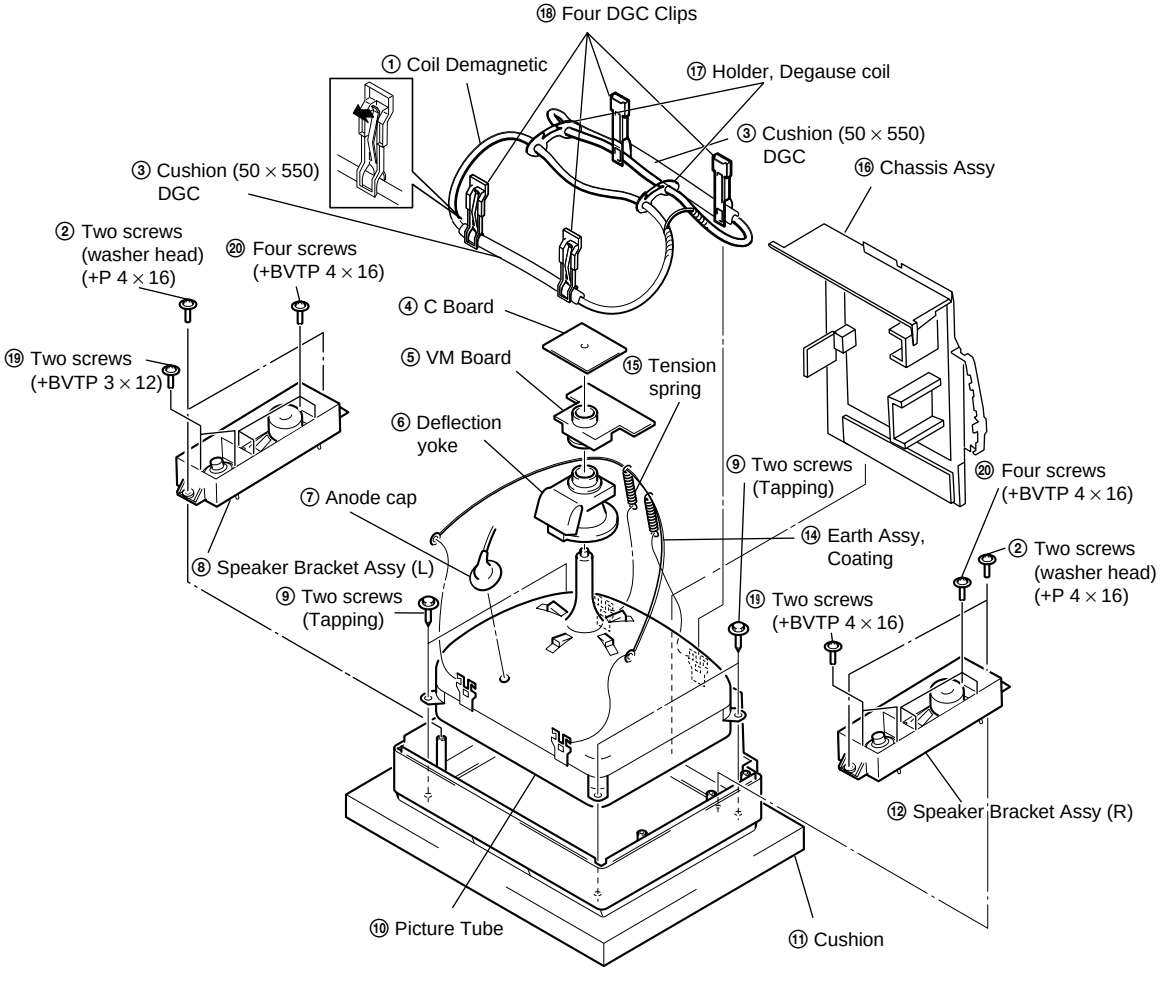
2-11. H5 BOARD REMOVAL



2-12. A AND B3 BOARDS REMOVAL



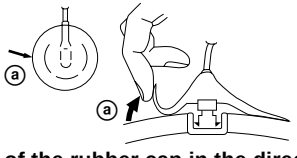
2-13. PICTURE TUBE REMOVAL



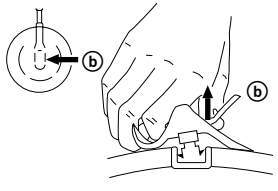
• REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

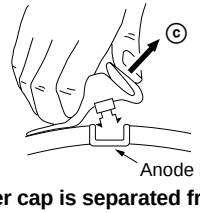
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



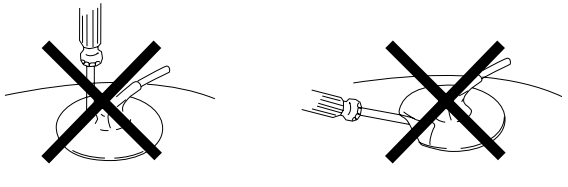
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Do not damage the surface of anode-caps with sharp shaped objects.
② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:
PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Position neck assy as shown in Fig3-2.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 3-1 through 3-4.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-2.)
6. Switch the raster signal to blue, then to red and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 3-5.)

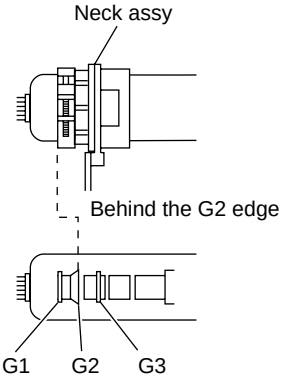


Fig. 3-1

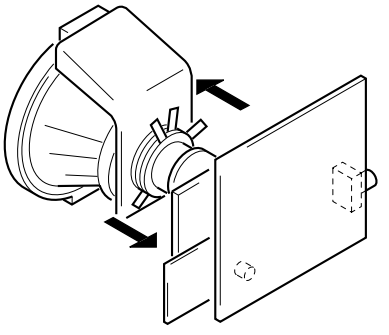


Fig. 3-2

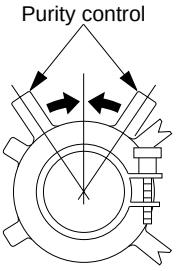


Fig. 3-3

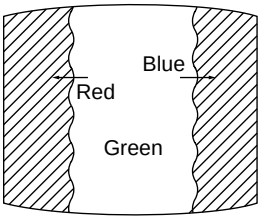


Fig. 3-4

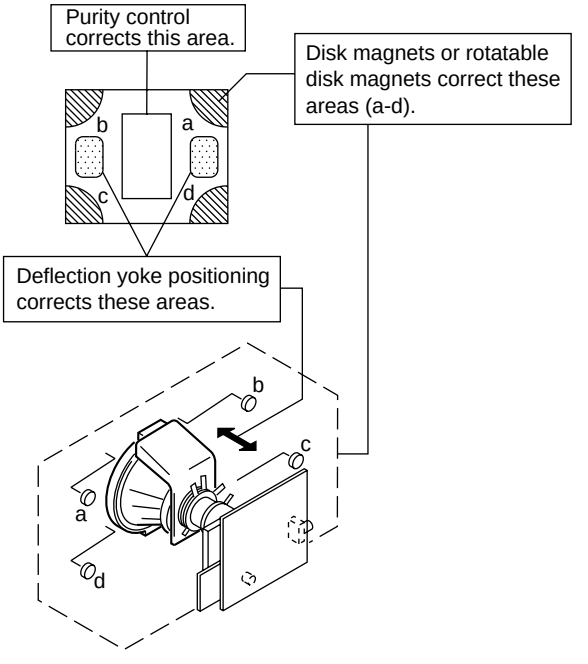


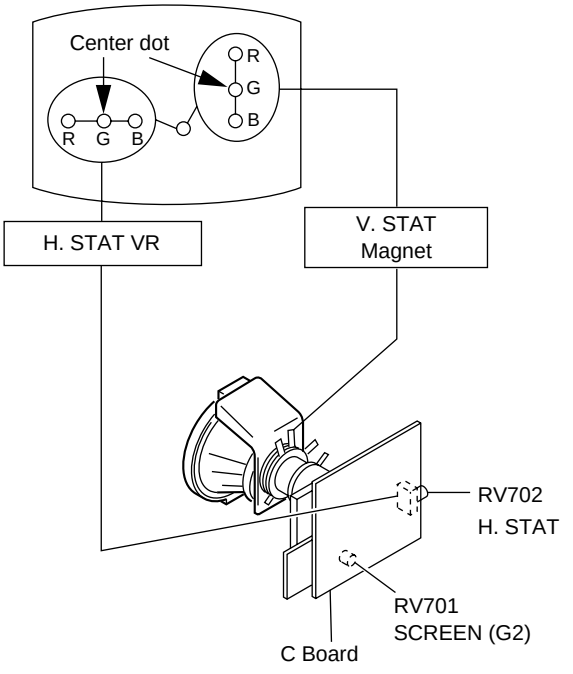
Fig. 3-5

3-2. CONVERGENCE

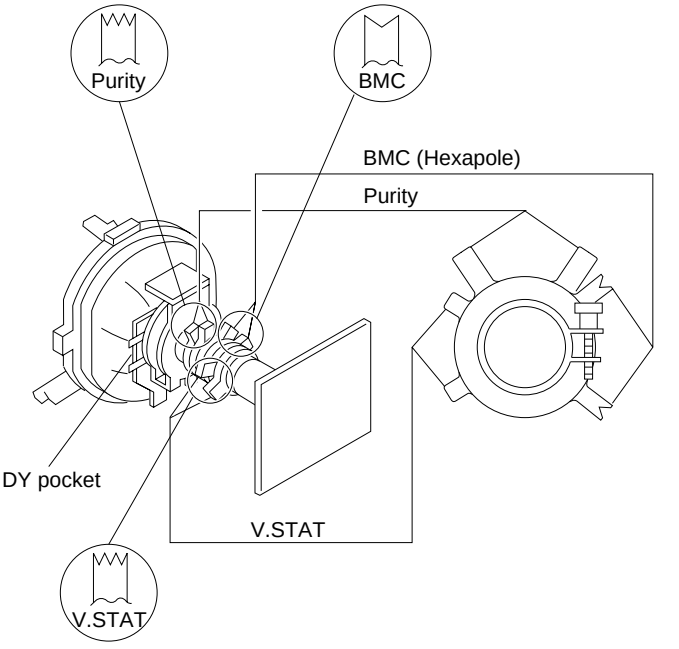
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

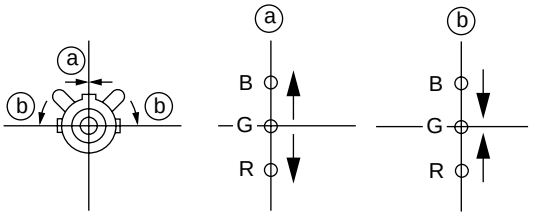
(1) Horizontal and Vertical Static Convergence



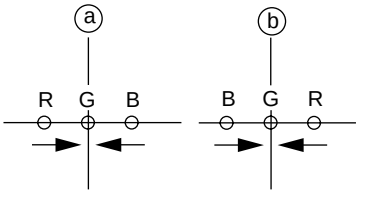
1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)



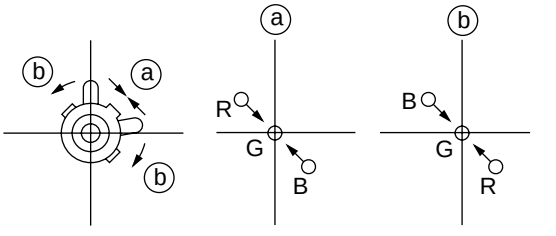
① V. STAT



② H. STAT VR

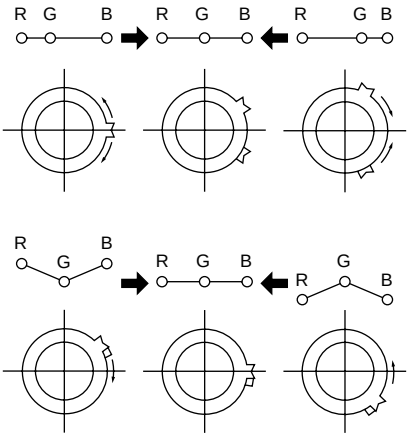


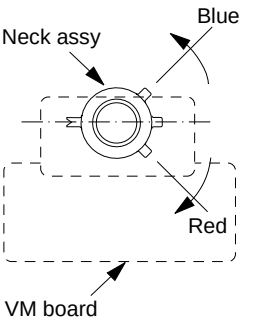
③

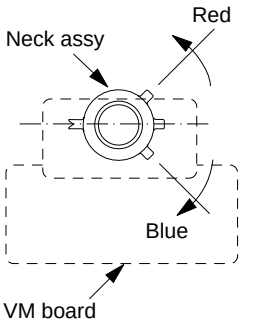


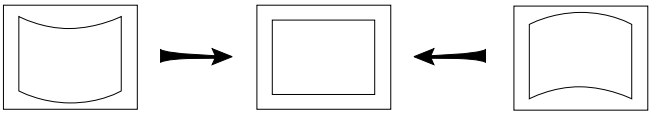
④ BMC (Hexapole) Magnet.

If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.









Note

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

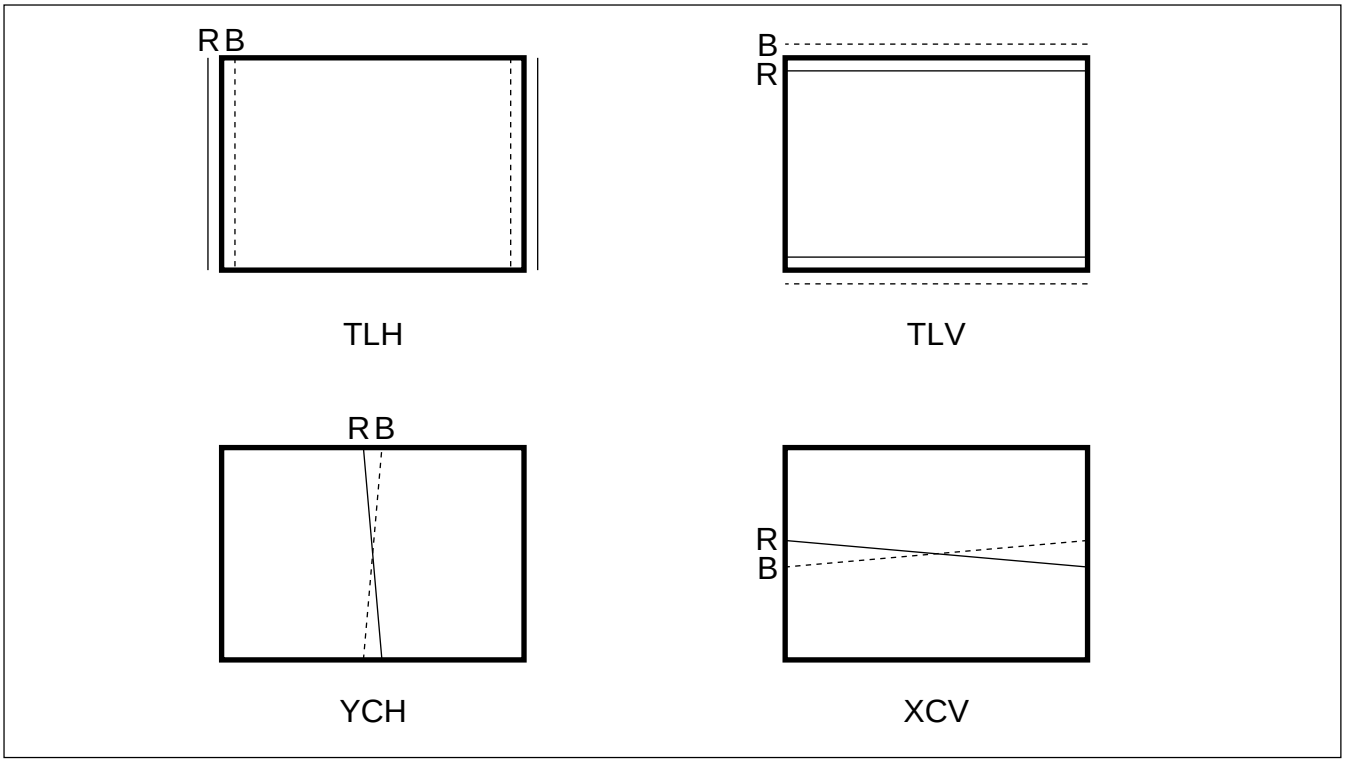
⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .
2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.

(2) Dynamic Convergence Adjustment

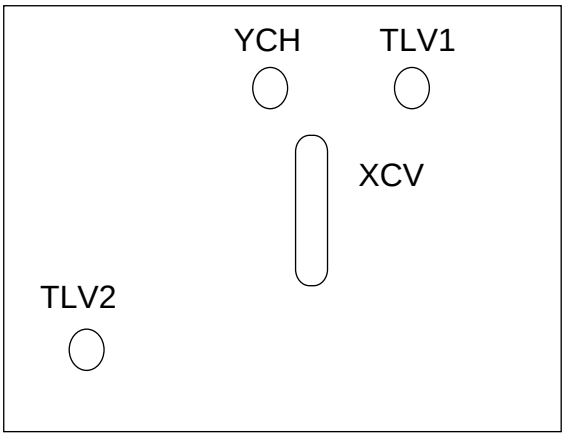
Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence

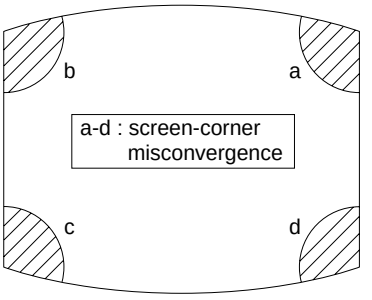


TLV	Rotate	TLV-2	VOL (29”, 34”) on DY
	Rotate	TLV	VOL (25”) on DY
XCV	Rotate	XCV	Adj core on DY
YCH	Rotate	YCH	VOL on DY
TLH	Insert	TLH	Correction Plate to DY Pocket (Left or Right)

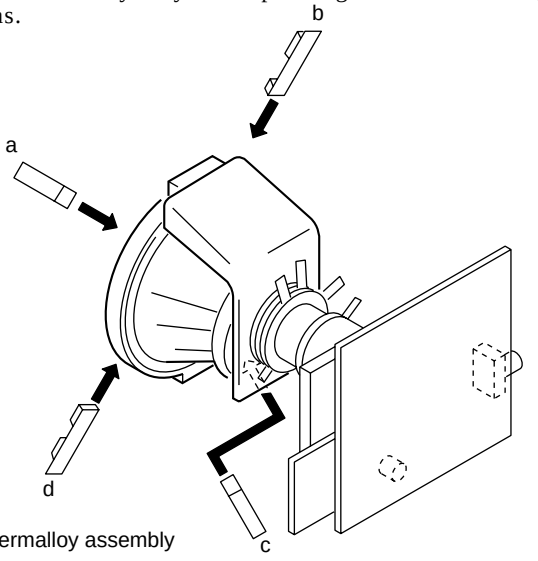
ON DY:



(3) Screen-corner Convergence

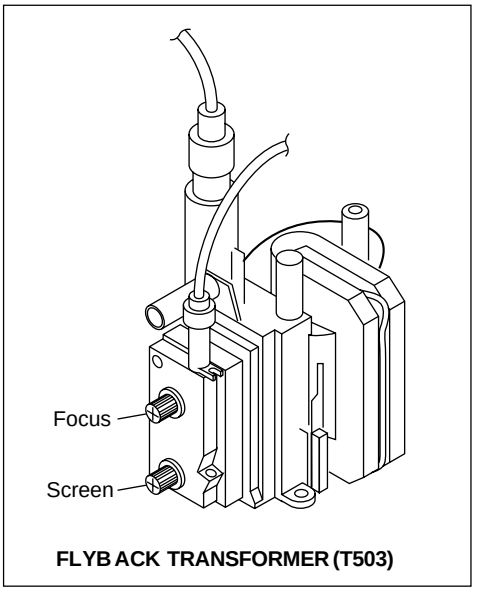


Fix a Permalloy assy corresponding to the misconverged areas.



3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.

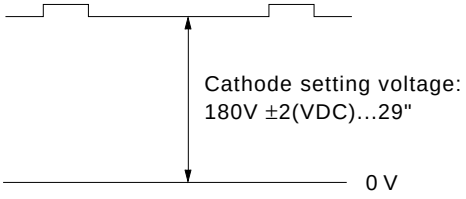


FLYBACK TRANSFORMER (T503)

3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C board cathode to the oscilloscope.
4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
5) Adjust G2 (screen) on the FBT until picture shows the point before cut off.

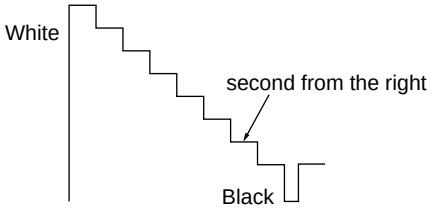


2. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the PICTURE to minimum.
4) Select GCT (WHB 4) and BCT (WHB 5) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
5) Set the PICTURE to maximum.
6) Select GDR (WHB 1) and BDR (WHB 2) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
7) Write into the memory by pressing [MUTING] then [0].

3. SUB BRIGHT ADJUSTMENT

1) Set to service mode.
2) Input a staircase signal of black to white from the pattern generator.
3) BRIGHTNESS .... 50%.
   PICTURE ..... MINIMUM
4) Select SBR (WHB7) with [1] and [4], and adjust SBR (WHB7) level with [3] and [6] so that the second stripe from the right is dimly lit.



SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-914 that come with this unit.

a. ENTERING SERVICE MODE

With the unit on standby
↓
DISPLAY
↓
5
↓
VOL (+)
↓
POWER

This operation sequence puts the unit into service mode.

b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press POWER button on the commander), then press POWER button again, hereupon it becomes TV mode.

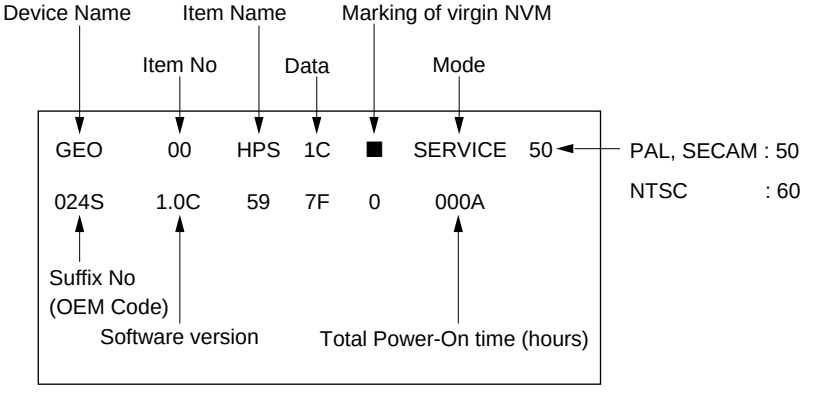
c. METHOD OF WRITE INTO MEMORY

1) Set to Service Mode.
2) Press 1 (UP) and 4 (DOWN), select an item of adjustment.
3) Press MUTING button and it will indicate WRITE on the screen.
4) Press 0 button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

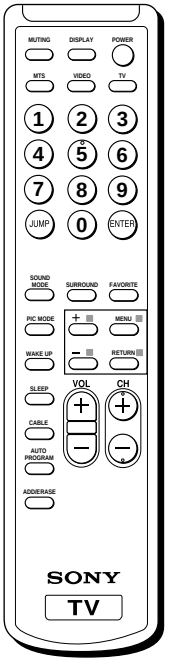
1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

The screen display is :



1, 4 ↓	Select the adjustment item.
3, 6 ↓	Raise/lower the data value.
MUTING ↓	Writes.
0	Executes the writing.

7, 0	All the data becomes the values in memory.
8, 0	All user control goes to the standard state.
5, 0	Service data initialization (Be sure not to use usually.)
2, 0	Write 50Hz adjustment data to 60Hz, or vice versa.



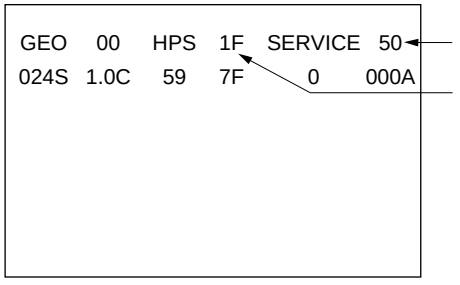
RM-914

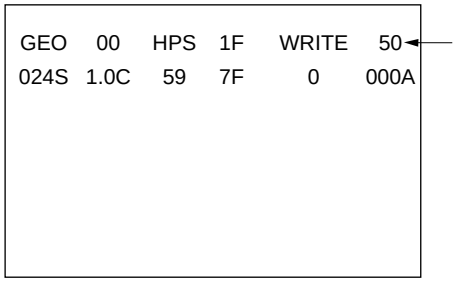
4-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

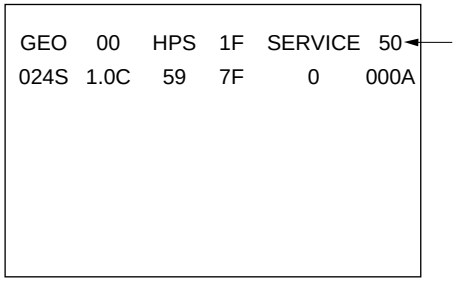
This explanation uses H-Position as an example.

1. Select “GEO 00 HPS” with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the [MUTING] button. (The display changes to WRITE.)
5. Execute the writing with the [0] button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)





Written with [MUTING]



Write executed with [0]

Use the same method for all Items. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Note : 1. In [WRITE], the data for all items are written into memory together.

2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
GEO	0	HPS	7	3F	H Position	50/60Hz	12 (7-2)	CXA2130S(88H)	9A (7-2)
	1	HSZ	1F	3F	H Size	50/60Hz	11 (7-2)		99 (7-2)
	2	PAP	1F	3F	Pin Amp	50/60Hz	13 (7-2)		9B (7-2)
	3	TLT	7	0F	Trapezium	50/60Hz	15 (7-4)		9D (7-4)
	4	VPS	1F	3F	V Position	50/60Hz	0F (7-2)		97 (7-2)
	5	VSZ	1F	3F	V Size	50/60Hz	0E (7-2)		96 (7-2)
	6	SCO	7	0F	S Correction	50/60Hz	10 (7-4)		98 (7-4)
	7	VLN	7	0F	V Linearity	50/60Hz	10 (3-0)		98 (3-0)
	8	BOW	7	0F	AFC Bow	50/60Hz	16 (7-4)		9E (7-4)
	9	AGL	7	0F	AFC Angle	50/60Hz	16 (3-0)		9E (3-0)
	10	UPN	1F	3F	Upper Pin	50/60Hz	14 (7-2)		9C (7-2)
	11	LPN	2F	3F	Lower Pin	50/60Hz	18 (7-2)		A0 (7-2)
	12	HBL	1	1	H Blanking on/off		18 (1)		ID (1)
	13	LBL	0F	0F	Left H Blanking	50/60Hz	17 (7-4)		9F (7-4)
	14	RBL	2	0F	Right H Blanking	50/60Hz	17 (3-0)		9F (3-0)
WHB	0	RDR	1F	3F	R Drive	DYNAMIC/others	09 (7-2)	CXA2130S(88H)	A7 (7-2)
	1	GDR	1F	3F	G Drive	DYNAMIC/others	0A (7-2)		A8 (7-2)
	2	BDR	1F	3F	B Drive	DYNAMIC/others	0B (7-2)		A9 (7-2)
	3	RCT	7	0F	R Cutoff	SECAM/others	07 (3-0)		AB (3-0)
	4	GCT	7	0F	G Cutoff	SECAM/others	08 (7-4)		AC (7-4)
	5	BCT	7	0F	B Cutoff	SECAM/others	08 (3-0)		AC (3-0)
	6	BMN	15	1F	Brightness Minimum Data		06 (7-2)		106
	7	SBR	1F	3F	Sub Brightness Control		06 (7-2)		107
SAJ	0	PMX	36	3F	Picture Maximum Data		03 (7-2)	CXA2130S(88H)	105
	1	SHU	8	0F	Sub Hue Control	TV/Video	05 (7-2)		108
	2	SSH	8	0F	Sub Sharpness Control	TV/Video	07 (7-4)		109
	3	SCL	1F	3F	Sub Color Control	NTSC/others	04 (7-2)		10A
VP	0	EHT	5	0F	EHT Comp	50/60HLC	15 (3-0)	CXA2130S(88H)	9D (3-0)
	1	GMA	2	03	Gamma Correction (separated in STANDARD mode)	NTSC/others	0B (1-0)		359 (1-0)
	2	YDL	0D	0F	Y Delay	PAL/SECAM/NTSC/DVD	0C (3-0)		35C (3-0)
	3	SST	1	03	SECAM ID Start Position		1B (1-0)		73 (1-0)
	4	SSP	1	03	SECAM ID Stop Position		1B (3-2)		73 (3-2)
	5	SLV	2	03	SECAM ID Level		1C (1-0)		74 (1-0)
	6	SBF	22	3F	SECAM BELL fO		1C (7-2)		74 (7-2)
	7	DYC	1	1	Dynamic Color on/off		0A (1)		62 (1)
	8	ABL	1	1	ABL Mode Switching (except STANDARD mode)		09 (1)		61 (1)
	9	VTH	1	1	ABL Detection Vth Switching		09 (0)		61 (0)
	10	SFO	1	1	FO Switching for Sharpness	NTSC/others	05 (1)		34A (1)
	11	DCX	1	1	DC Trans. Ratio Switching		06 (1)		5E (1)
	12	SHT	1	1	Pre-/Overshoot ratio Switch	NTSC/others	06 (0)		34B (0)

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
VP	13	HDW	0	1	H Drive Pulse Width Switch		00 (6)		58 (6)
	14	AFC	1	03	AFC Gain Control	TV/Video/Text	0F (1-0)		A5 (1-0)
	15	HOS	7	0F	H Oscillation		0C (7-4)		64 (7-4)
	16	HSS	0	1	Slice Level of H Sync Sep.		0D (1)		65 (1)
	17	VSS	0	1	Slice Level of V Sync Sep.		0D (0)		65 (0)
	18	HMS	1	1	Macro Vision C/m off/on	50/60Hz	0E (0)		96 (0)
	19	YUV	0	1	YUV Switch Control		01 (0)		59 (0)
	20	CDV	1	3	CD mode for Video and RF under no signal	Video only	0D (5-4)		357 (5-4)
	21	RON	1	1	R ON	not memorized	01 (3)		59 (3)
	22	GON	1	1	G ON	not memorized	01 (2)		59 (2)
	23	BON	1	1	B ON	not memorized	01 (1)		59 (1)
	24	PON	1	1	P ON	not memorized	00 (7)		58 (7)
	25	BLK	0	1	BLK Off		12 (0)		6A (0)
	26	VMC	0	1	VM Off		13 (0)		6B (0)
AP	0	BCS	2	3	Bass Center Shift		#4 (3-0)	TDA7315(80H)	34C (1-0)
	1	TCS	1	3	Treble Center Shift		#5 (3-0)		34D (1-0)
	2	TRF	2	3	RF Treble Offset		#5 (3-0)		356 (1-0)
MSP	0	WST	15	FF	W/G Stereo Threshold			MSP3415D(84H)	165
	1	WBT	EC	FF	W/G Bilingual Threshold				166
	2	WLL	5	FF	W/G Monaural Threshold				167
	3	WAC	1	0F	W/G Agreement Count				168
	4	WDL	30	FF	W/G Search Delay				169
	5	NDL	20	FF	NICAM Search Delay				16A
	6	SDL	10	FF	Stereo status Read Delay				16B
	7	AGC	1	1	AGC Switch Auto/Constant		00BB (7)		116 (7)
	8	REL	28	3F	AGC Gain at Constant Mode		00BB (6-1)		116 (6-1)
	9	CRM	0	1	Carrier muting on/off		00BB (9)		115 (9)
	10	ACO	1	1	Audio Clock out on/off		0083 (5)		11A (5)
	11	FP	1B	7F	FM Prescale for non-M system		000E (14-8)		321
	12	FPM	32	7F	FM Prescale for M system		000E (14-8)		322
	13	FH	36	7F	FM Prescale for HDEV		000E (14-8)		323
	14	FHM	65	7F	FM Prescale for HDEV and M		000E (14-8)		324
	15	WGP	1C	7F	W/G Prescale		000E (14-8)		325
	16	NIP	7F	7F	NICAM Prescale		0010 (14-8)		14F
	17	ERR	50	FF	Auto FM switch Threshold		0021 (10-3)		174
	18	VOL	6D	FF	Loud Speaker gain 7000h to 7ff0h		0000 (11-4)		352

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
SVP	0	SBF	22	3F	SECAM BELL f0		1C (7-2)	CXA2060AS(8AH)	89 (7-2)
	1	HOS	7	0F	H Oscillation		0C (7-4)		84 (7-4)
	2	SHU	8	0F	Sub Hue Control	TV Video	05 (7-2)		310
	3	SCL	1F	3F	Sub Color Control	NTSC/others	04 (7-2)		311
PIP	0	SDL	2	0F	Delay of output SELECT		01 (6-3)	SDA9288X(D6H)	190 (6-3)
	1	PPH	15	FF	H Position of TOP-LEFT Pin P		01/02		19F
	2	PPV	2E	FF	V Position of TOP-LEFT Pin P		03 (7-0)		1A0
	3	YDL	0	07	Delay of Luminance Input		04 (2-0)		193 (2-0)
	4	HDI	0	0F	H Sync Delay for Inset		06 (3-0)		195 (3-0)
	5	ISC	1	1	Inset Clock Selection		06 (4)		195 (4)
	6	CLP	1	1	Clamp Pulse Selection		06 (5)		195 (5)
	7	CLC	0	1	Clamp Cycle Selection		06 (6)		195 (6)
	8	CON	0	0F	Contrast Adjustment for inset		09 (7-4)		198 (7-4)
	9	PLL	2	03	H Position For A-ch		0D (6-5)		19C (6-5)
	10	PDV	0	0F	PIP V Pedestal Level		0E (7-4)		19D (7-4)
	11	PDU	0	0F	PIP U Pedestal Level		0E (3-0)		19D (3-0)
TXT	0	TXH	1	3	Teletext Horizontal Position		10(1-0)	SAA5261(58H)	348 (1-0)
	1	TXV	0	3	Teletext Vertical Position		10(5-4)		348 (5-4)
OPM	0	OSH	11	3F	OSD H Position	Option-Misc	1F1	CXP86461(60H)	17B (7-2)
	1	COM	3	03	Comb Selection(00-No Comb, 01-Glass Comb, 02-Digital Comb, 03-Multi Standard Comb)				33F (7-6)
	2	APC	1	1	APC Switch				33E (5)
	3	TSY	0	03	TV Sys at Auto TV Sys				33E (4-3)
	4	MUT	1	1	No Signal Mute				33E (0)
	5	AFM	1	1	Auto FM switch				33E (1)
	6	RFB	0	3	C-BPF Control				33F (5-4)
	7	TVO	2	7	Tilt to V-Angle offset				33F (2-0)
	8	DBL	0	1	Disable Blueback function				33F (2)
	9	SSO	1	1	Speed Search Option				
	10	SCH	1	7F	CH Selection for Shipping Condition	NTSC only			367 (6-0)
	11	SCA	1	1	Cable/Air Selection for Shipping Condition	NTSC only			367 (7)
OPB	0	OP1	F1	FF	Optional Bits 1 (see below)	Option-Bits		CXP86461(60H)	4C
	1	OP2	7	FF	Optional Bits 2 (see below)				4D
	2	OP3	A8	FF	Optional Bits 3 (see below)				4E
	3	OP4	4	FF	Optional Bits 4 (see below)				4F

NOTE

- shaded items are fixed data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

ITEM INFORMATION.

No. OPB0 OP1

Item	XTAL 4.43	XTAL 3.58	SECAM	2nd. Lang	B/G	I	D/K	M
KV-XS29N90	1	1	1	1	0	0	0	1
KV-XS29N93	1	1	1	1	0	0	0	1

No. OPB1 OP2

Item	TOP	NICAM	HDEV	Thai Bil	Dis. Fav	DVD Input	AV Input	
KV-XS29N90	0	0	0	0	0	0	1	1
KV-XS29N93	0	0	0	0	0	1	1	1

AV Input 00 = no AV Input 01 = 1 AV Input
10 = 2 AV Input 11 = 3 AV Input

DVD Input Effective only when “AV Input” is set to 3 AV Input.

Dis Fav. Disable Favorite Channel (Effective For XF-L (21" & 14") Models Only)

No. OPB2 OP3

Item	PIC Rotate	2199 Curve	Auto PIC	Auto TV sys	US ST	AV Mono	11 KEY	Color SW
KV-XS29N90	0	0	1	0	1	0	0	0
KV-XS29N93	0	0	1	0	1	0	0	0

PIC Rotate*1 PIC Rotation Switch 0 = disabled, 1 = enabled.

2199 Curve*1 2199 Volume Curve Selection 0 = Others, 1 = 2199 Volume Curve

Auto PIC Auto Picture Improvement 0 = inactive, 1 = active

A-TVsys Auto TV System in Auto Program 0 = disabled, 1 = enabled

US ST USA Stereo 0 = disabled, 1 = enabled

AV Mono*1 AV Mono model 0 = Stereo, 1 = Mono (No Balance & Surround selection)

11 Key Front Key Selection 0 = 7 key model, 1 = 11 key model

Color SW*2 Color Data Selection in Dynamic Mode 0 = 65 (No PIP), 1 = 57 (PIP)

Note *1 – For XF-L (21" & 14") Models Only
*2 – For XF-H (34", 29" & 25") Models Only

No. OPB2 OP4

Item	XS/LF	Korean ST Vid	Vid NTSC 3.58	Forced 50/60	–	Chinese	Korean	–
KV-XS29N90	0	0	0	0	1	0	0	0
KV-XS29N93	0	0	0	0	1	0	0	0

APPLICABLE TO XS ONLY - Sub Language Selection (Bit 0-Bit 2)

XS/LF Select Different Picture and Sound Mode for XS Series (0) and LF Series (1). LF series will be using XF-H Picture and Sound mode setting.

Korean ST Korean Stereo 0 = disabled, 1 = enabled

Vid NTSC 3.58 Video Colour 0 = Multi System 1 = Single System (NTSC 3.58)

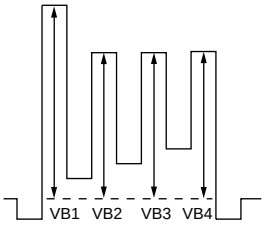
Forced 50/60 Forced to 50/60Hz during no signal

0 = 60Hz 1 = 50Hz

4-3. PICTURE QUALITY ADJUSTMENTS

SUB COLOR ADJUSTMENT

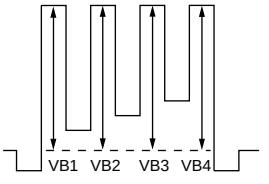
1. Input a PAL color-bar.
2. Set to the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
3. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
4. Set to Service Mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust to VB2=VB3=VB4 with [3] and [6].
5. Press [MUTING] → [0] of the commander to write the data.
6. Adjust SAJ 3 'SCL' as step 2 to 5 when receiving NTSC color-bar.



VB2 = VB3 = VB4

SUB HUE ADJUSTMENT

1. Select Video 1.
2. Input a NTSC color-bar, video into Video 1.
3. Set the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 'SHU' with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].

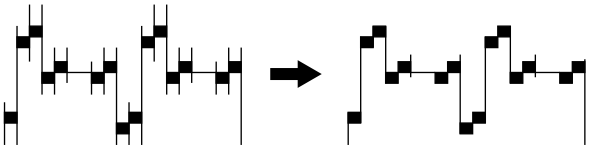


VB1 = VB2 = VB3 = VB4

6. Press [MUTING] → [0] of the commander to write the data.

BELL FILTER ADJUSTMENT

1. Input SECAM color-bar signal.
2. Connect the dual-trace oscilloscope to CN303 pin ⑨ (not mounted).
3. Adjust SERVICE MODE, ITEMS 'SBF' as shown below.



4-4. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

When replacing IC003 (MEMORY), be sure to change IC001 (μ-COM) to the following new IC at the same time.
IC001(μ-CON):
CXP750097-024S

1. Enter to Service Mode.

2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.

3. Call each item number and check if the respective screen shows the normal picture.
   In cases where items are not well adjusted, rectify the items with fine adjustment.
   Write the data per each item number ([MUTING] +[0]).

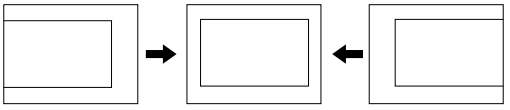
4. Select item numbers "OPB0" (OP1), "OPB1" (OP2) and "OPB2" (OP3) and respectively set the bit per model with command buttons [3] and [6].

5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
   (This will also cancel Service Mode.)

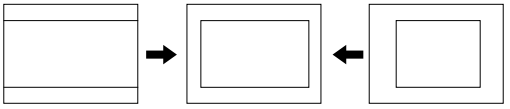
4-5. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

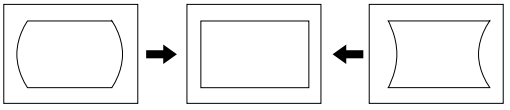
GEO 0 HPS (H POSITION)



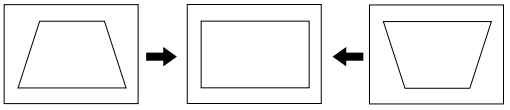
GEO 1 HSZ (H SIZE)



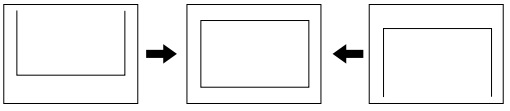
GEO 2 PAP (PIN AMP)



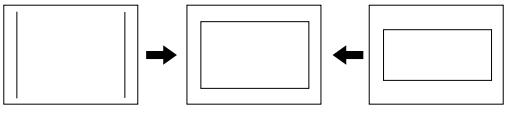
GEO 3 TLT (TRAPEZIUM)



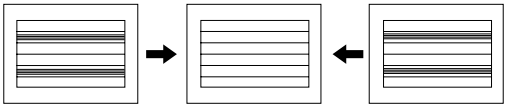
GEO 4 VPS (V POSITION)



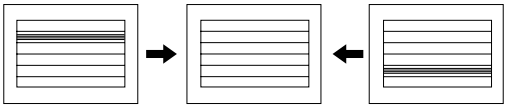
GEO 5 VSZ (V SIZE)



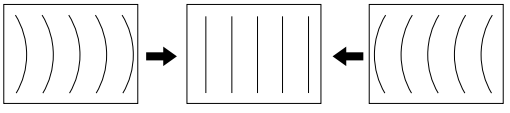
GEO 6 SCO (VERTICAL S-Correction)



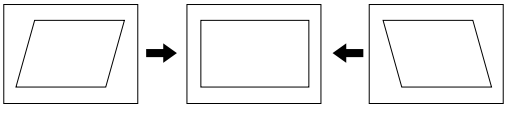
GEO 7 VLN (V LINEARITY)



GEO 8 BOW (AFC.BOW)

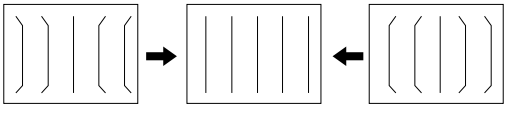


GEO 9 AGL (AFC.ANGLE)



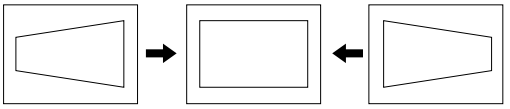
GEO 0A UCP (UPPER CORNER PIN)

GEO 0B LCP (LOWER CORNER PIN)



PICTURE DISTORTION ADJUSTMENT (2)

H-TRAPEZOID (Rotate RV1801)



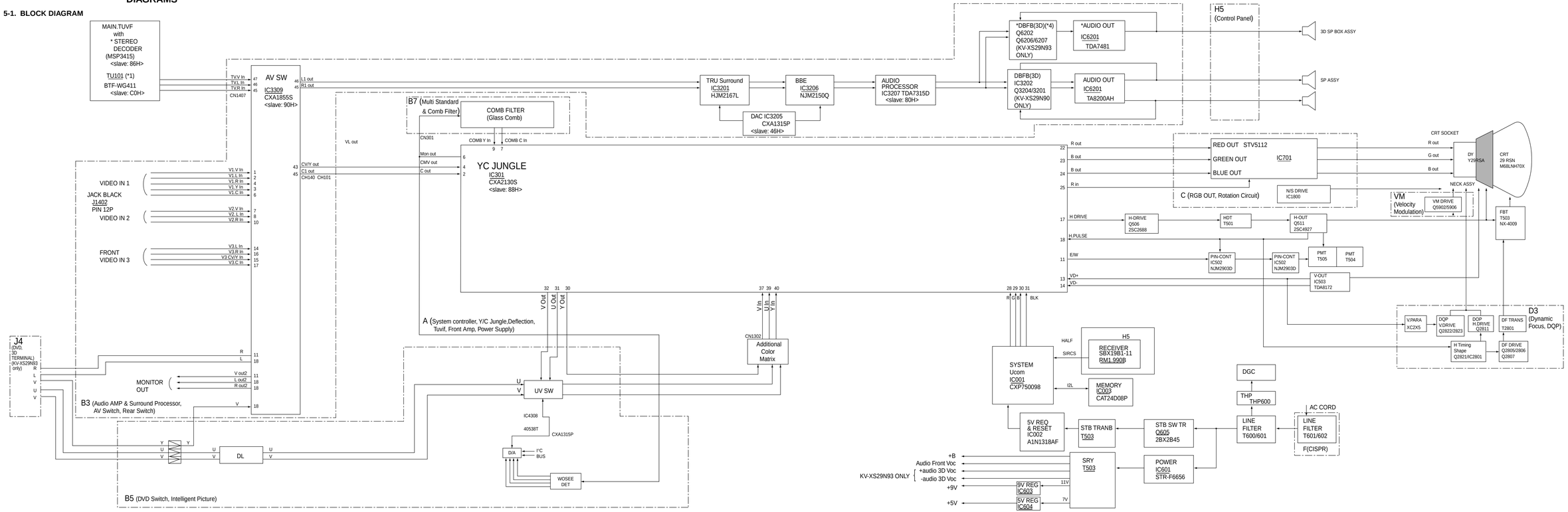
MEMO

MEMO

MEMO

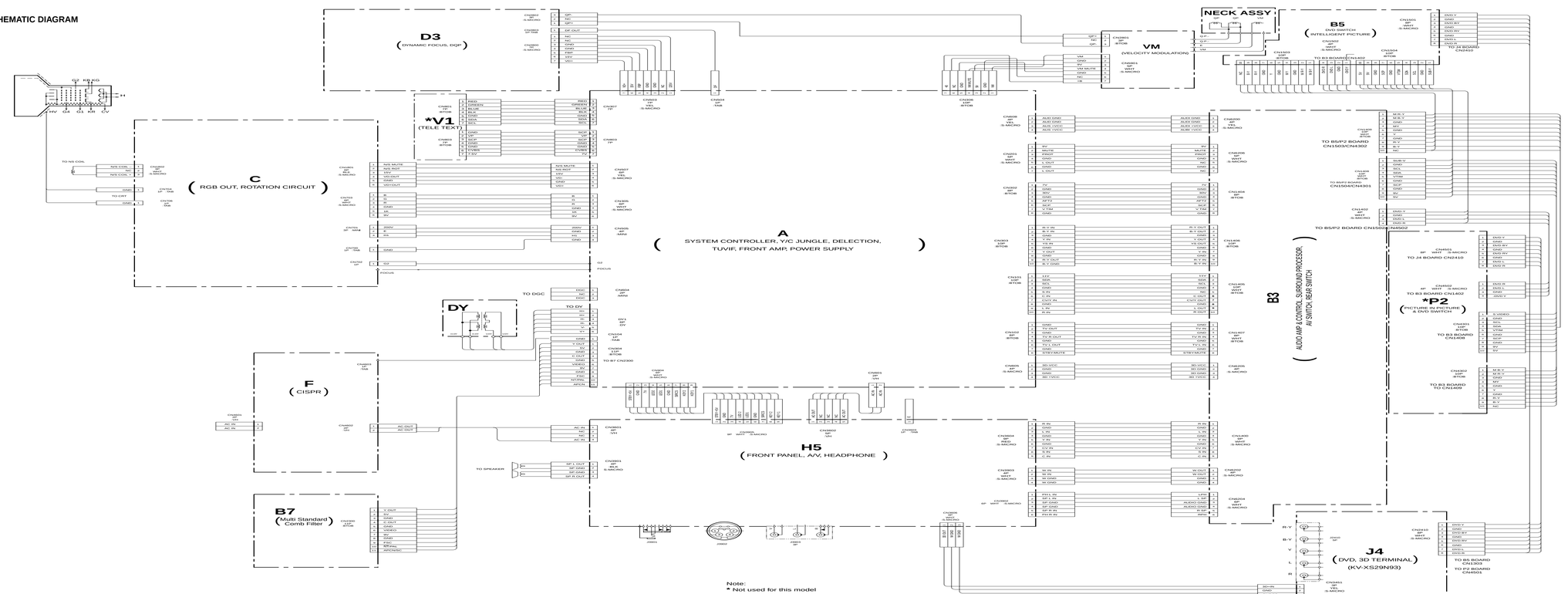
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM

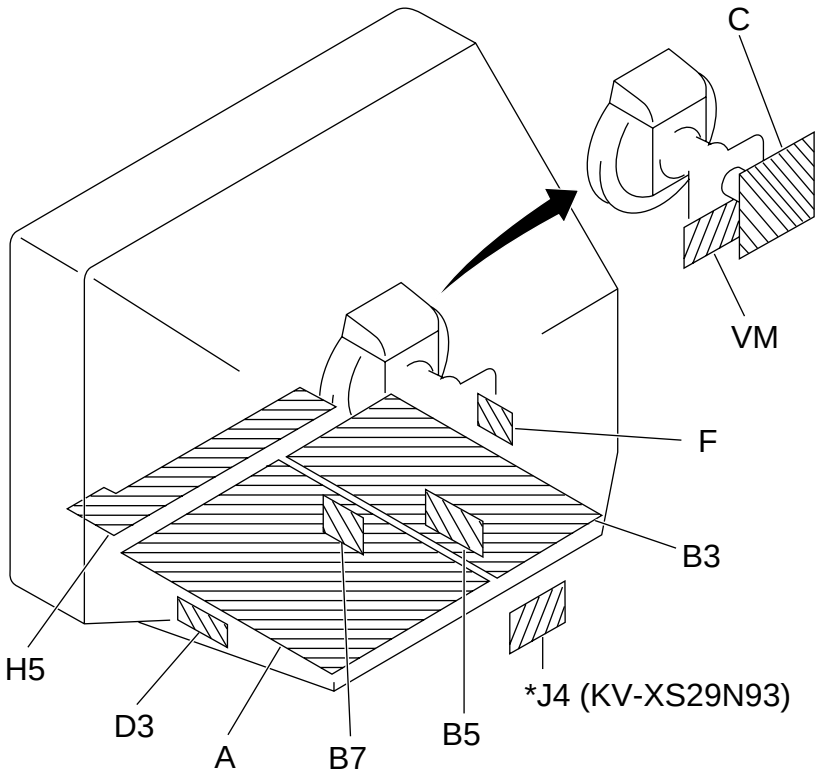


KV-XS29N90/XS29N93 KV-XS29N90/XS29N93
RM-914 RM-914

5-2. FRAME SCHEMATIC DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in µF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)

- : nonflammable resistor.
- △ : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- **Readings are taken with a color-bar signal input.**
  no mark : PAL
  ( ) : SECAM
  [ ] : NTSC 3.58
  « » : NTSC 4.43
- **Readings are taken with a 10 MΩ digital multimeter.**
- **Voltage are dc with respect to ground unless otherwise noted.**
- **Voltage variations may be noted due to normal production tolerances.**
- **All voltages are in V.**
- *** : Cannot be measured.**
- **Circled numbers are waveform references.**
- **: B + bus.**
- **: B – bus.**
- **: signal path.**

Ref erence inf ormation

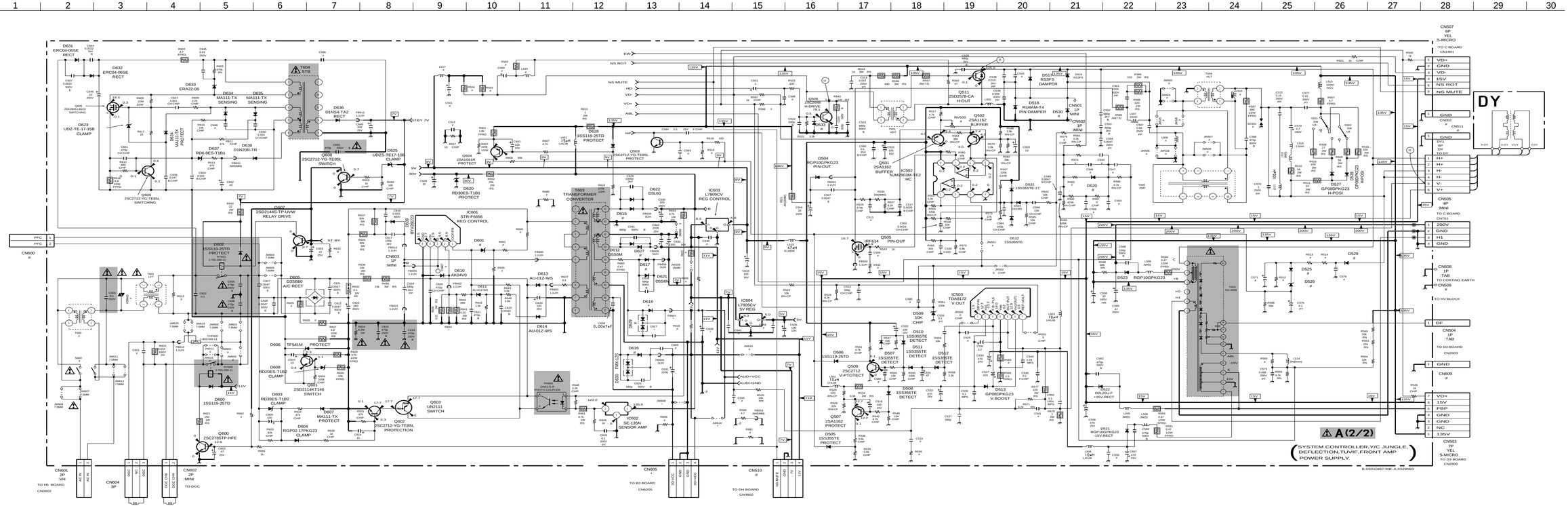
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(1) Schematic Diagram of A(1/2) Board

A (1/2)
SYSTEM CONTROLLER,Y/C JUNGLE, DEFLECTION,TU/IF,FRONT AMP POWER SUPPLY
IC001
CXP750097-024S
CONTROLLER
IC003
M24C08-BN6
NVM
IC201
IC301
CXA2139S
Y/C JUNGLE
IC203
IC204
IC100
IC901
TU101
BTF WG441
CP301
CN901
CN904
9P
WHT
:S-MICRO
TO H5 BOARD
CN3905
CN905
CN608
4P
YEL
:S-MICRO
TO B3 BOARD
CN6200
CN201
5P
WHT
:S-MICRO
TO B3 BOARD
CN6206
CN302
TO B3 BOARD
CN1404
CN105
1P
:MINI
CN106
3P
WHT
:S-MICRO
TO B3 BOARD
CN1403
CN303
10P
:BTOB
TO B3 BOARD
CN1406
CN101
10P
:BTOB
TO B3 BOARD
CN1405
CN204
CN203
CN102
8P
:BTOB
TO B3 BOARD
CN1407
CN104
1P
:TAB
TO F BOARD
CN4603
CN205
TO H3 BOARD
CN3603
CN103
RELAY
CN202
4P
:MINI
CN306
4P
:RELAY
TO VM1 BOARD
CN5901
CN305
6P
WHT
:S-MICRO
TO C BOARD
CN703
CN310
CN304
11P
:BTOB
TO B7 BOARD
CN2300
CN301
CN307
CN308
CN309
TO B6 BOARD
CN8401
CN107
TO B6 BOARD
CN8403
Q201
MUTE SWITCH
Q202
MUTE SWTICH
Q203
VCC SWITCH
Q204
VCC RECTIFIER
Q205
MUTE
Q206
MUTE
Q207
MUTE
Q301
2SA1162
VCC FALL
DETECTOR
Q302
MATRIX
Q305
2SA1162
BUFFER
Q306
2SA1162
SW
Q307
2SC2712
HP OUT
Q308
2SA1162
HP OUT
Q311
2SC2712
INV
Q312
2SA1162-G
BUFFER
Q313
2SC2712
BUFFER
Q315
UN2213
SWITCH
Q001
2SA1162-YG
SWITCH
Q002
2SC2712
BUFFER
Q003
UN2111
SWITCH
Q004
UN2211
SWITCH
Q101
2SC2712-YG
BUFFER
D301
1SS355TE
PROTECT
D303
1SS355TE-17
PROTECT
D304
1SS355TE-17
PROTECT
D305
1SS355TE
D315
1SS355TE-17
PROTECT
D316
RD7.5-5SB1-T1
IC002
MM1319AFBE
RESET SUREG
AUDIO IN 1R
MONITOR OUT
AUDIO IN 2R
AUDIO R
AUDIO IN 1L (MONO)
AUDIO IN 2L (MONO)
AUDIO L (MONO)
VIDEO IN 1
VIDEO IN 2
VIDEO
STBY 7V
NS ROT
ST-BY
NS MUTE
11V
ABL
EW
VD+
VD-
B-SSS10467-WB.-A.XS29N93

(2) Schematic Diagram of A(2/2) Board

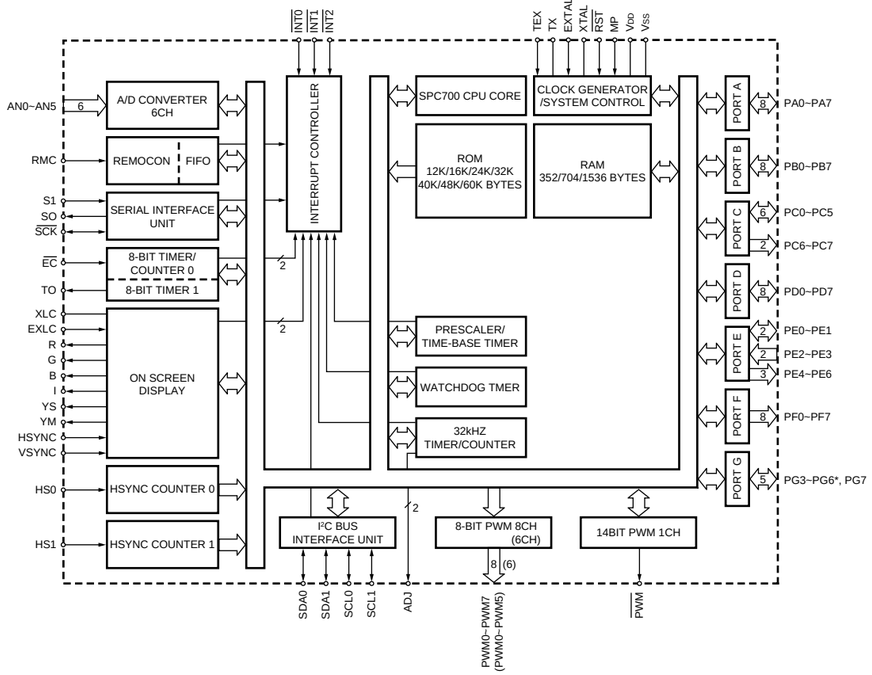


Schematic diagram
◀ A (1/2) board

Schematic diagram
A (2/2) board ▶

KV-XS29N90/XS29N93
RM-914

A BOARD IC001 CXP750097-024S



A BOARD ✻ MARK LIST

	KV-XS29N93	KV-XS29N90
C627	680P 500V	#
C628	1000 35V	#
CN605	4P	#
D618	RN4Z	#
FB607	1.1µH	#
JW608	#	JW(5)
JW614	#	JW(5)
R654	12W :RS	#

Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.

A BOARD WAVEFORMS

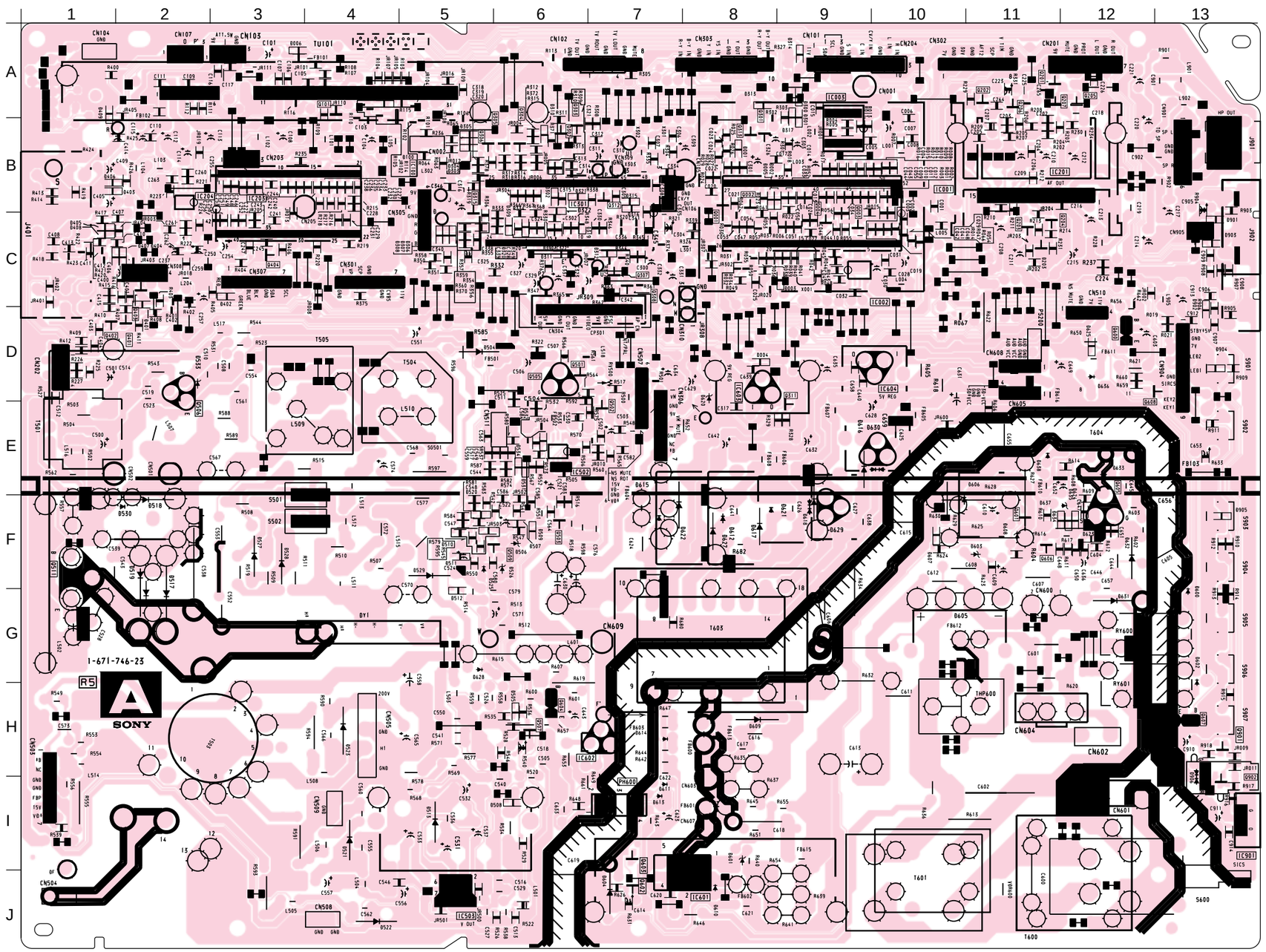
① 4.8Vp-p (V)	② 5.1Vp-p (V)	③ 4.0Vp-p (V)	④ PAL/SECAM 1.2Vp-p (H)	④ NTSC 1.5Vp-p (H)
⑤ PAL/SECAM 1.0Vp-p (V)	⑤ NTSC 1.1Vp-p (V)	⑥ 0.2Vp-p (H)	⑦ PAL/SECAM 1.2Vp-p (H)	⑦ NTSC 1.4Vp-p (H)
⑧ PAL/SECAM 1.2Vp-p (H)	⑧ NTSC 1.2Vp-p (H)	⑨ PAL/SECAM 1.5Vp-p (H)	⑨ NTSC 1.5Vp-p (H)	⑩ PAL/SECAM 3.2Vp-p (H)
⑩ NTSC 3.4Vp-p (H)	⑪ 3.4Vp-p (H)	⑫ PAL/SECAM 3.2Vp-p (H)	⑫ NTSC 3.58 3.2Vp-p (H)	⑫ NTSC 4.43 3.4Vp-p (H)
⑬ PAL/SECAM/NTSC 3.58 1.3Vp-p (H)	⑭ 106Vp-p	⑮ 240Vp-p	⑯ 1.1Vp-p (V)	

KV-XS29N90/XS29N93
RM-914

A [SYSTEM CONTROLLER, Y/C JUNGLE, DEFLECTION, TUVIF, FRONT AMP, POWER SUPPLY]

PRINTED WIRING BOARD

– A Board –



NOTE:
The circuit indicated at left contains high voltage of over 600 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

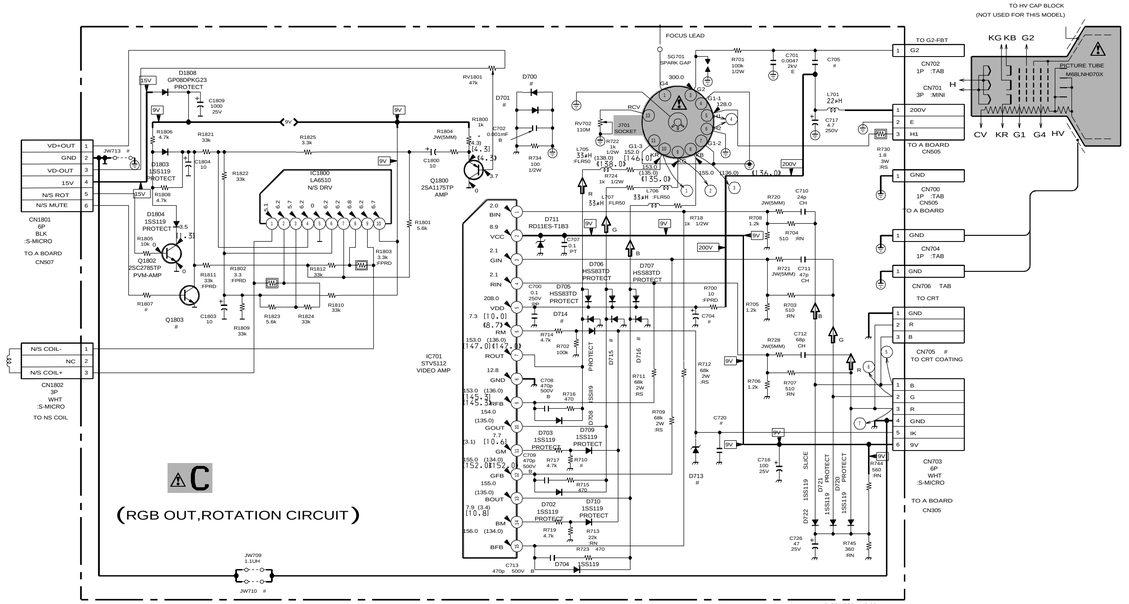
A BOARD

IC		DIODE		D602	G-13
				D603	F-11
IC001	B-10	D001	B-8	D604	J-7
IC002	C-10	D002	B-8	D605	G-10
IC003	A-9	D003	C-9	D606	E-11
IC100	B-5	D004	D-8	D607	F-10
IC201	B-11	D005	B-8	D608	F-11
IC203	B-3	D006	A-3	D609	H-8
IC204	B-2	D100	B-5	D610	J-8
IC301	B-6	D203	C-11	D611	I-7
IC502	E-6	D300	A-9	D612	F-8
IC503	J-5	D301	B-9	D613	I-7
IC601	I-8	D302	B-6	D614	H-7
IC602	H-7	D303	B-5	D615	E-7
IC603	D-8	D304	B-5	D616	E-9
IC604	D-10	D305	B-5	D617	F-8
IC901	I-13	D308	B-4	D618	F-9
PH600	H-7	D309	B-6	D620	D-8
		D310	A-6	D621	F-9
TRANSISTOR		D311	C-6	D622	F-8
		D312	C-7	D623	F-12
Q001	B-8	D313	A-8	D624	F-12
Q002	B-8	D315	B-7	D625	D-12
Q003	C-9	D316	C-7	D627	F-8
Q004	C-9	D317	B-9	D628	G-5
Q101	A-4	D314	A-9	D629	F-9
Q201	A-11	D319	C-7	D630	E-10
Q202	A-11	D320	C-6	D631	G-12
Q203	C-11	D321	B-6	D632	F-12
Q204	C-12	D322	B-6	D633	E-12
Q205	A-12	D401	D-2	D634	F-11
Q206	A-11	D402	C-3	D635	F-12
Q207	A-12	D403	B-2	D636	D-12
Q301	B-8	D405	C-1	D637	F-11
Q302	B-6	D406	B-1	D638	E-11
Q303	A-6	D407	C-2	D901	C-13
Q304	B-6	D408	C-1	D902	D-13
Q305	B-5	D409	A-1	D903	C-13
Q306	B-5	D504	D-5	D904	D-13
Q307	C-7	D505	H-6	D905	F-13
Q308	C-7	D506	F-6	D906	I-13
Q311	D-9	D507	F-6		
Q312	B-7	D508	I-5		
Q313	B-8	D509	F-6		
Q315	B-5	D510	F-5		
Q401	D-2	D511	F-5		
Q402	D-1	D512	G-5		
Q403	D-2	D513	I-5		
Q404	C-3	D517	F-2		
Q501	D-6	D518	F-2		
Q502	E-7	D519	F-2		
Q503	F-6	D520	E-5		
Q505	D-6	D521	I-4		
Q506	D-2	D522	J-4		
Q507	H-6	D523	H-4		
Q509	F-6	D525	F-5		
Q511	F-1	D526	F-6		
Q600	D-12	D527	F-3		
Q601	F-11	D528	F-3		
Q602	J-7	D529	F-5		
Q603	I-7	D530	F-2		
Q604	H-6	D531	E-6		
Q605	E-12	D532	E-6		
Q606	F-11	D533	D-2		
Q607	H-13	D534	E-6		
Q608	D-12	D600	G-13		
Q901	H-13	D601	I-8		
Q902	H-13				

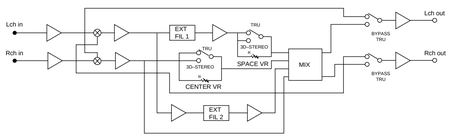
(3) Schematic Diagram of B3 Board

B3
AUDIO AMP & CONTROL,SURROUND PROCESSOR,AV SWITCH, REAR SWITCH
CN1400 9P WHT :S-MICRO
R IN
GND
L IN
GND
Y IN
GND
CV IN
S IN
C IN
TO H5 BOARD CN3904
CN6204 6P WHT :S-MICRO
LPH
L SP
AUDIO GND
AUDIO GND
R SP
RPH
TO H5 BOARD CN3902
CN6200 4P YEL :S-MICRO
AUDI GND
AUDI GND
AUDI +VCC
AUDI +VCC
TO A BOARD CN608
CN6202
W OUT
W OUT
GND
GND
TO H5 BOARD CN3903
D1415 UDZSTE-179.1B
D1416 UDZSTE-179.1B PROTECT
Q3201 VOL.
Q3202 INDUCTOR
Q3203 INDICATOR
Q3204 VOL
D3201 RECTIFY
D3203 RECTIFY
IC3204 BASS BOOST
IC3202 µPC4558G2
Q6206 MUTING
Q6202 MUTING
Q6207 VOL.
D6205 RECTIFY
IC6200 TA8200AH AUDIO AMP
Q6203 UN2213 AMP
D6211 MA111-TX PROTECT
D6212 MA111-TX PROTECT
Q6204 UN2213 AMP
Q6208 UN2213 AMP
Q6201 UN2213 AMP
Q6214 AMP
IC6201 3D AMP
Q6200 MUTING
D6200 PROTECTOR
Q6205 MUTING
IC3203 NJU4066BM-T2 SW
IC3201 NJM2187L TRU-SURR
IC3206 NJM2150D SUR. PROC.
IC3205 CXA1315P MID THRO
IC3207 TDA7315D-013TR TONE CTRL
IC3200 µPC4558G2 AUDIO MIXER
IC1403 REG
IC1404 L7809CV REG
TU1401
IC1402 AUDIO IMPENDENCE MATCHING
Q1410 BUFFER
Q1409
Q1408
D1401 UDZSTE-179.1B PROTECT
D1402 UDZSTE-179.1B PROTECT
D1403 UDZSTE-179.1B PROTECT
D1410 UDZSTE-179.1B PROTECT
D1411 UDZSTE-179.1B PROTECT
D1412 UDZSTE-179.1B PROTECT
D1406 UDZSTE-179.1B PROTECT
D1407 UDZSTE-179.1B PROTECT
D1408 UDZSTE-179.1B PROTECT
D1404 UDZSTE-179.1B PROTECT
D1409 UDZSTE-179.1B
D1405 UDZSTE-179.1B PROTECT
J1402
VIDEO IN 3
VIDEO IN 2
VIDEO IN 1
J1401 S TERMINAL
IC1401 CXA1855S A/V SW
Q1401 BUFFER
Q1402 2SC2712-YG BUFFER
Q1403 2SC2712 BUFFER
Q1404 2SC2712-YG BUFFER
CN6205 TO A BOARD CN605
3D-VCC
3D GND
3D GND
3D+VCC
CN6206 5P WHT :S-MICRO TO A BOARD CN201
9V
MUTE
PROT
GND
NC
GND
NC
CN1404 TO A BOARD CN302
7V
GND
30V
GND
AFT2
SCP
VTIM
GND
CN1405 10P WHT :BTOB TO A BOARD CN101
11V
SDA
SCL
GND
NC
C OUT
CV/Y OUT
GND
L OUT
R OUT
CN1406 10P TO A BOARD CN303
R-Y OUT
B-Y OUT
GND
Y OUT
YS OUT
GND
Y IN
GND
R-Y IN
B-Y IN
CN1407 8P WHT :BTOB TO A BOARD CN102
GND
TV IN
GND
TV R IN
GND
TV L IN
GND
STBY-MUTE
CN1408 10P TO B5 BOARD CN1503
5V
9V
GND
SCP
GND
VTIM
SDA
SCL
GND
SUB-V
CN1409 10P TO B5 BOARD CN1504
NC
B-Y
R-Y
GND
Y
GND
MY
GND
M R-Y
M B-Y
CN1403 3P WHT :S-MICRO TO A BOARD CN106
GND
GND
CV/Y OUT
CN1401
CN1402 TO B5 BOARD CN1502
DVD R
DVD L
GND
-DVD Y
B-SSSBG3S-...-B3.XS29.

(4) Schematic Diagram of C Board



B3 BOARD IC3201 NJM2187L



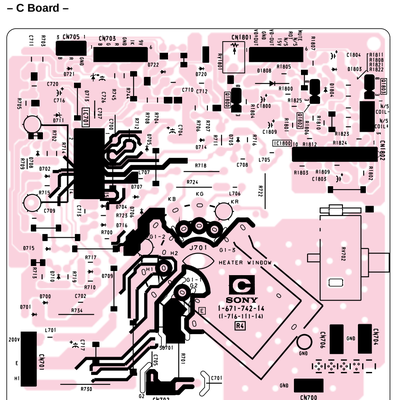
B3 BOARD ✻ MARK LIST

	KV-XS29N93	KV-XS29N90
C1401	330 16	#
C1403	47 25	#
C1404	0 :CHIP	0.1 05 :CHIP
C1406	100 :CHIP	#
C1408	10	#
C1411	0.1 25 :CHIP	0 :CHIP
C1419	100 :CHIP	#
C1421	1 16 :CHIP	#
C1432	100 16	#
C1439	470 :CHIP	#
C1442	470 :CHIP	#
C1457	1 16 :CHIP	#
C3202	#	0.33 :PT
C3238	#	0.47 25:CHIP
C3239	#	0.33 :PT
C3243	#	0.033 25 :CHIP
C3244	#	1 16 :CHIP
C3245	#	0.47 25 :CHIP
C3246	#	47 :CHIP
C3247	#	4.7
C3248	#	100 :CHIP
C3249	0 :CHIP2.2	16 :CHIP
C3250	#	1 16 :CHIP
C3251	#	10
C3252	#	100 :CHIP
C3253	#	100 16
C3254	0 :CHIP2.2	16 :CHIP
C3255	#	47 :CHIP
C3256	#	4.7
C3257	#	1 16 :CHIP
C3258	#	0.033 25 :CHIP
C3276	0.47 16 :CHIP	0.15 16 :CHIP
C3277	0.1 25 :CHIP	0.15 16 :CHIP
C3278	0.47 16 :CHIP	0.15 16 :CHIP
C3279	0.1 25 :CHIP	0.15 16 :CHIP
C6201	10	#
C6207	0.1 :CHIP	#
C6208	0.1 :CHIP	#
C6215	100 16	#
C6216	0.1 :CHIP	#
C6218	0.1 :CHIP	#
C6219	2.2	#
C6221	1	#
C6225	0.1 :CHIP	#
C6226	0.1 :CHIP	#
C6227	2200	#
C6228	0.1 :CHIP	#
C6229	2.2 16 :CHIP	#
C6230	2200	#
C6231	2200	#
C6232	0.001 :CHIP	#
C6233	680 :CHIP	#
C6234	0.0047 :CHIP	#
C6235	100 :CHIP	#
C6236	0.1 :CHIP	#
C6237	0 :PT	#
C6238	0.001 :CHIP	#
C6239	2200 25	#
C6240	0.1 :PT	#
C6244	0.0033 :CHIP	0.0022 :CHIP
C6245	0.0033 :CHIP	0.0022 :CHIP
C6251	22	#
C6252	22	#

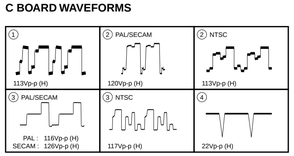
	KV-XS29N93	KV-XS29N90
C6253	1	#
CN1402	#	4P
CN6202	4P	#
CN6205	4P	#
D3201	#	ISS355TE-17
D3203	#	ISS355TE-17
D6200	RD5.IES.TIB3	#
D6205	ISS355TE-17	#
FB6200	JW (5)	#
FB6201	1.1	#
FB6202	1.1	#
IC3204	#	UPC4558G2
IC1402	NJM4558M-TE2	#
IC6201	TDA7481	#
J1402	12P	9P
JR1408	#	0 :CHIP
JR1409	0 :CHIP	#
JR1410	0 :CHIP	#
JR6201	0 :CHIP	#
JW1458	JW (15)	#
JW3216	JW (10)	#
JW6220	JW (10)	#
JW6224	JW (5)	#
JW6225	JW (17.5)	#
JW6226	JW (12.5)	#
JW6227	JW (10)	#
L6202	65uH	#
PS6200	LINK.IC	#
PS6201	LINK.IC	#
Q1408	2SD601A-QRS-TX	#
Q1409	2SD601A-QRS-TX	#
Q3201	#	2SK246GR-TPE2
Q3202	#	2SD601A-QRS-TX
Q3203	#	2SD601A-QRS-TX
Q3204	#	2SK246GR-TPE2
Q6200	2SD601A-QRS-TX	#
Q6202	2SD601A-QRS-TX	#
Q6205	2SD601A-QRS-TX	#
Q6206	2SD601A-QRS-TX	#
Q6207	2SD601A-QRS-TX	#
R1400	220 :CHIP	#
R1411	47 :CHIP	0 :CHIP
R1412	47 :CHIP	0 :CHIP
R1413	220 :CHIP	#
R1421	2.2 :CHIP	#
R1424	10 :CHIP	#
R1425	820 :CHIP	#
R1427	3.9 :CHIP	#
R1429	47 :CHIP	0 :CHIP
R1432	470 :CHIP	#
R1439	0 :CHIP	#
R1444	47 :CHIP	#
R1448	560 :CHIP	#
R1452	47 :CHIP	0 :CHIP
R1454	56 :CHIP	#
R1475	47 :CHIP	#
R1476	56 :CHIP	#
R1487	2.2 :CHIP	#
R1488	2.2 :CHIP	#
R1489	75 :CHIP	#
R1501	680 :CHIP	#
R1503	10 :CHIP	100 :CHIP
R1504	10 :CHIP	100 :CHIP

	KV-XS29N93	KV-XS29N90
R3200	#	1 :CHIP
R3201	#	1 :CHIP
R3202	#	100 :CHIP
R3203	#	1 :CHIP
R3204	#	3.3 :CHIP
R3205	#	6.8 :CHIP
R3206	#	390 :CHIP
R3207	#	10 :CHIP
R3220	#	100 :CHIP
R3221	#	10 :CHIP
R3222	#	10 :CHIP
R3223	#	680 :CHIP
R3224	150 :CHIP	560 :CHIP
R3233	#	6.8 :CHIP
R3234	#	390 :CHIP
R3235	#	150 :CHIP
R3236	#	470 :CHIP
R3237	#	680 :CHIP
R3245	#	100 :CHIP
R3246	#	680 :CHIP
R3251	#	150 :CHIP
R3252	#	470 :CHIP
R3253	#	680 :CHIP
R3254	#	10 :CHIP
R3255	#	1 :CHIP
R3256	#	1 :CHIP
R3257	#	100 :CHIP
R3258	#	1 :CHIP
R3259	#	3.3 :CHIP
R3262	150 :CHIP	560 :CHIP
R3275	0 :CHIP	#
R3276	0 :CHIP	#
R3278	22 :CHIP	3.3 :CHIP
R3279	22 :CHIP	3.3 :CHIP
R6200	47 :CHIP	#
R6205	10 :CHIP	#
R6207	1 :CHIP	#
R6235	150 :CHIP	#
R6236	12 :CHIP	#
R6237	47 :CHIP	#
R6239	1.5 :CHIP	#
R6240	10 :FPRD	#
R3241	470 2W :RS	#
R6242	470 2W :RS	#
R6243	8.2 :FPRD	#
R6244	10 :CHIP	#
R6245	1 :CHIP	1.5 :CHIP
R6246	1 :CHIP	1.5 :CHIP
R6248	470 :CHIP	#
R6249	2.2 :CHIP	#
R6250	0 :CHIP	#
R6251	1 :CHIP	#
R6252	100 :CHIP	#
R6253	470 :CHIP	#
R6254	0 :CHIP	10 :CHIP
R6256	4.7 :CHIP	#
R6257	3.3 :CHIP	#
R6260	10 :CHIP	#
R6262	1.8 :CHIP	#
R6263	1.8 :CHIP	#
R6266	4.7 :CHIP	#
R6268	4.7 :CHIP	#

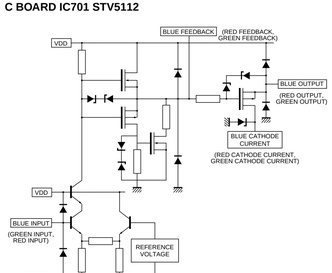
– C Board –



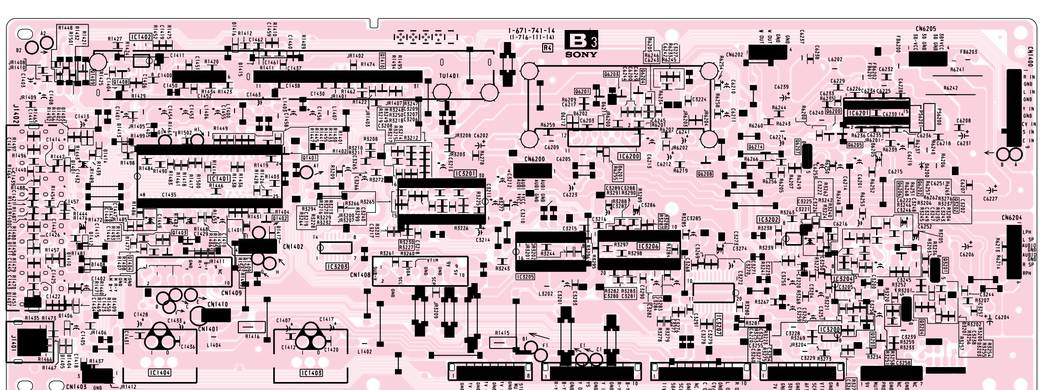
C BOARD WAVEFORMS



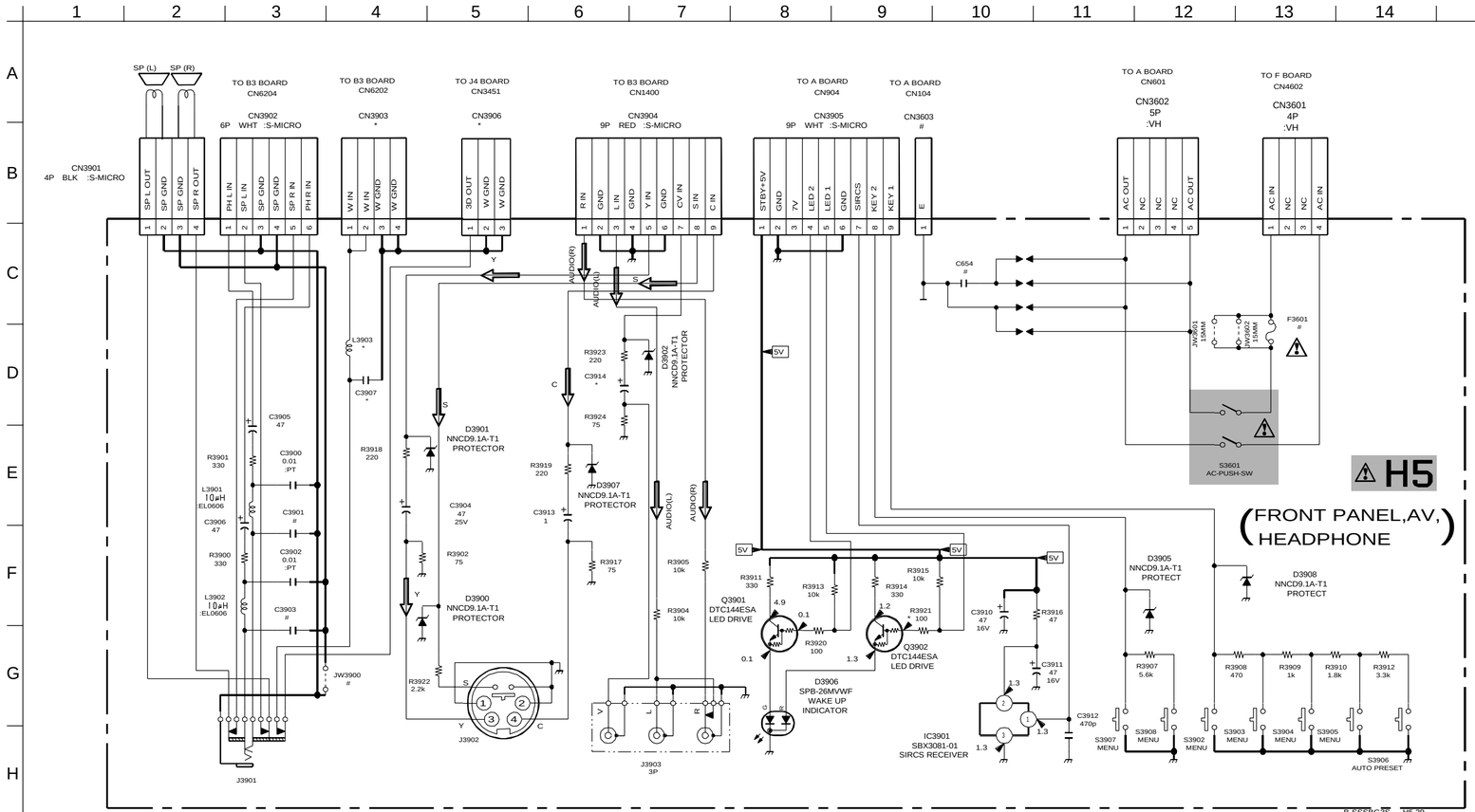
C BOARD IC701 STV5112



– B3 Board –



(5) Schematic Diagrams of F, H5 and J4 Boards

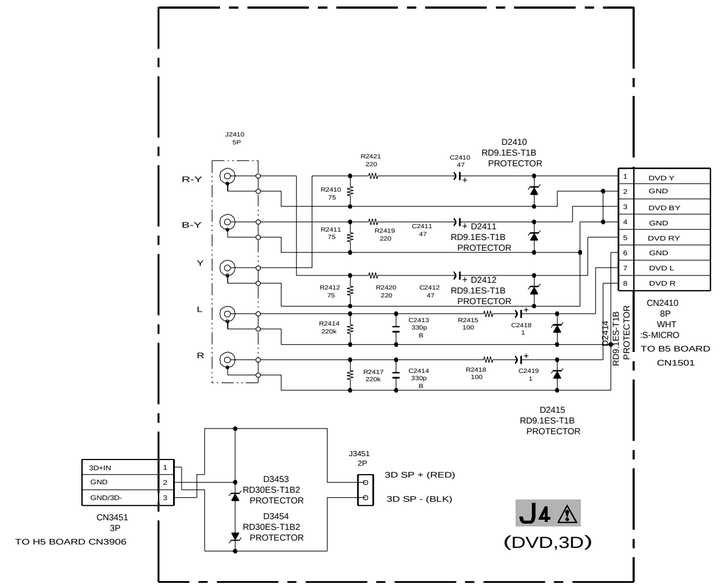


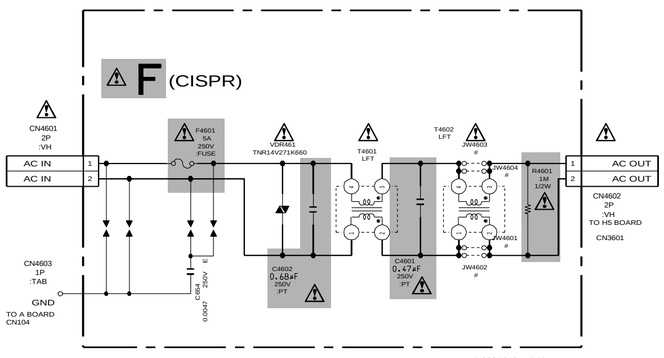
H5 BOARD ✻ MARK LIST

	KV-XS29N93	KV-XS29N90
C3907	1 :PT	#
C3914	100 16V	22
CN3903	4P	#
CN3906	3P	#
L3903	30μH	#

Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.

(KV-XS29N93 only)





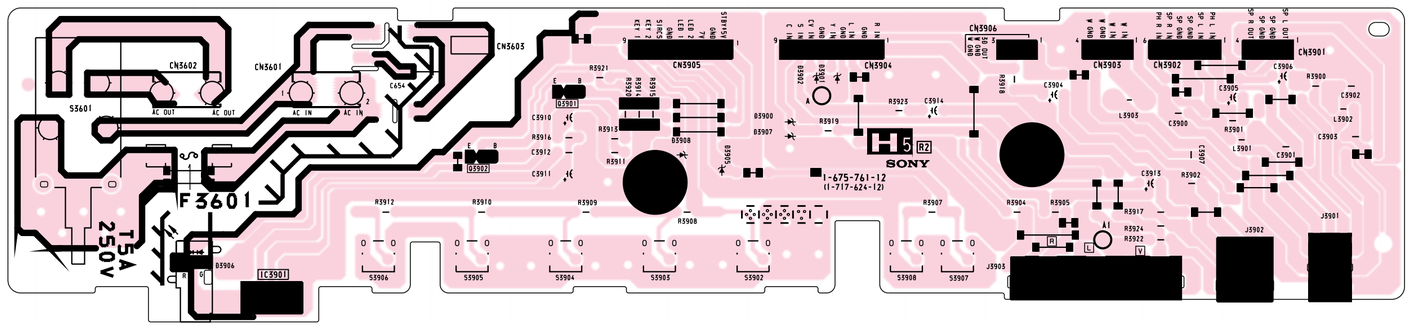
Schematic diagrams

← F H5 J4 boards

H5 [FRONT PANEL, AV, HEADPHONE] F [CISPR] J4 [DVD, 3D]

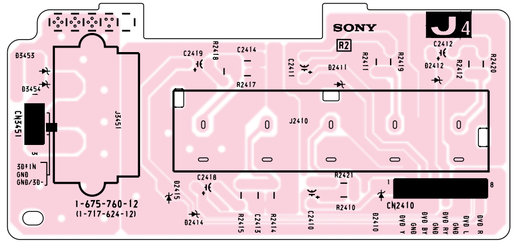
PRINTED WIRING BOARDS

– H5 Board –

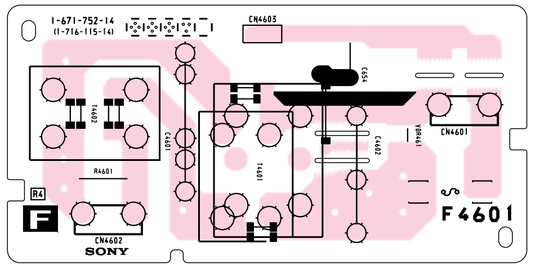


KV-XS29N90/XS29N93
RM-914

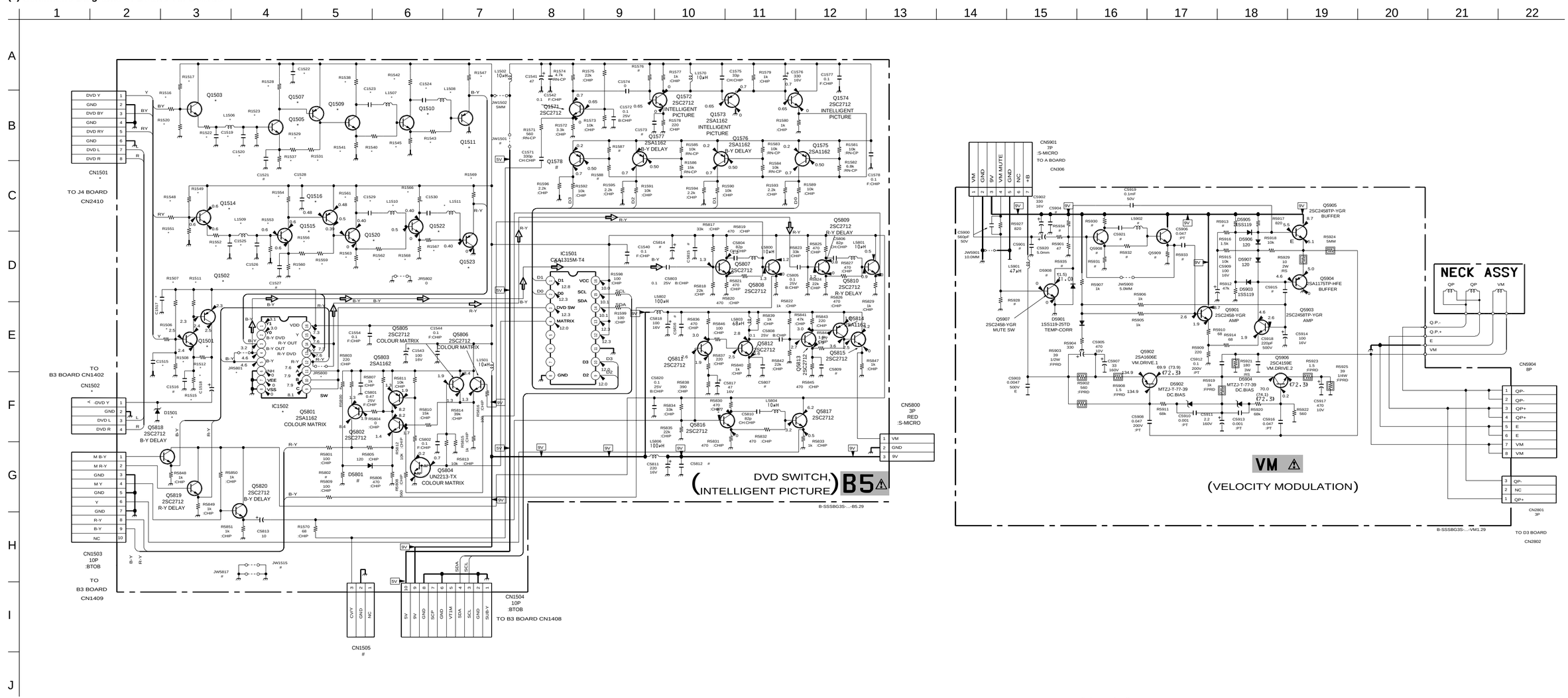
– J4 Board – (KV-XS29N93 only)



– F Board –



KV-XS29N90/XS29N93
RM-914

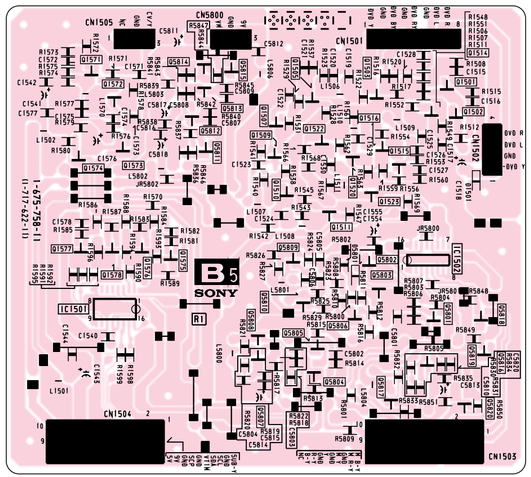

DVD SWITCH, INTELLIGENT PICTURE) B5
B-SSSBG3S-...-B5.29
VM
(VELOCITY MODULATION)
B-SSSBG3S-...-VM1.29
NECK ASSY
CN1501
TO J4 BOARD CN2410
CN1502
TO B3 BOARD CN1402
CN1503 10P :BTOB
TO B3 BOARD CN1409
CN1504 10P :BTOB
TO B3 BOARD CN1408
CN1505
CN5800 3P RED :S-MICRO
CN5901 7P :S-MICRO
TO A BOARD CN306
CN5904 8P
CN2801 3P
TO D3 BOARD CN2802
IC1501 CXA1315M-T4
IC1502
Q1501 2SC2712 B-Y DELAY
Q1503
Q1504 2SC2712 INTELLIGENT PICTURE
Q1505
Q1507
Q1509
Q1510
Q1511
Q1514
Q1515
Q1516
Q1520
Q1522
Q1523
Q1571 2SC2712
Q1572 2SC2712 INTELLIGENT PICTURE
Q1573 2SA1162 INTELLIGENT PICTURE
Q1574 2SC2712 INTELLIGENT PICTURE
Q1575 2SA1162
Q1576 2SA1162 R-Y DELAY
Q1577 2SA1162 B-Y DELAY
Q1578
Q5801 2SA1162 COLOUR MATRIX
Q5802 2SC2712
Q5803 2SA1162
Q5804 UN2213-TX COLOUR MATRIX
Q5805 2SC2712 COLOUR MATRIX
Q5806 2SC2712 COLOUR MATRIX
Q5807 2SC2712
Q5808 2SC2712
Q5809 2SC2712 R-Y DELAY
Q5810 2SC2712 R-Y DELAY
Q5811 2SC2712
Q5812 2SA1162
Q5813 2SC2712
Q5814 2SC2712
Q5815 2SC2712
Q5816 2SC2712
Q5817 2SC2712
Q5818 2SC2712 B-Y DELAY
Q5819 2SC2712 R-Y DELAY
Q5820 2SC2712 B-Y DELAY
Q5901 1SS119-25TD TEMP-CORR
Q5902 2SA1606E VM.DRIVE.1
Q5903 2SC2458TP-YGR AMP
Q5904 2SA1175TP-HFE BUFFER
Q5905 2SC2458TP-YGR BUFFER
Q5906 2SC4159E VM.DRIVE.2
Q5907 2SC2458-YGR MUTE SW
D1501
D5901 1SS119-25TD TEMP-CORR
D5902 MTZJ-T-77-39 DC.BIAS
D5903 1SS119
D5904 MTZJ-T-77-39 DC.BIAS
D5905 1SS119
DVD SW
MATRIX
SCL
SDA
VCC
GND
D1
D2
D3
9V
5V
B-Y
R-Y

B5 [DVD SWITCH, INTELLIGENT PICTURE]

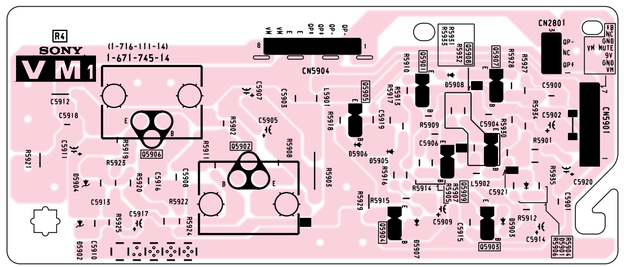
VM [VELOCITY MODULATION]

PRINTED WIRING BOARDS

– B5 Board –



– VM Board –



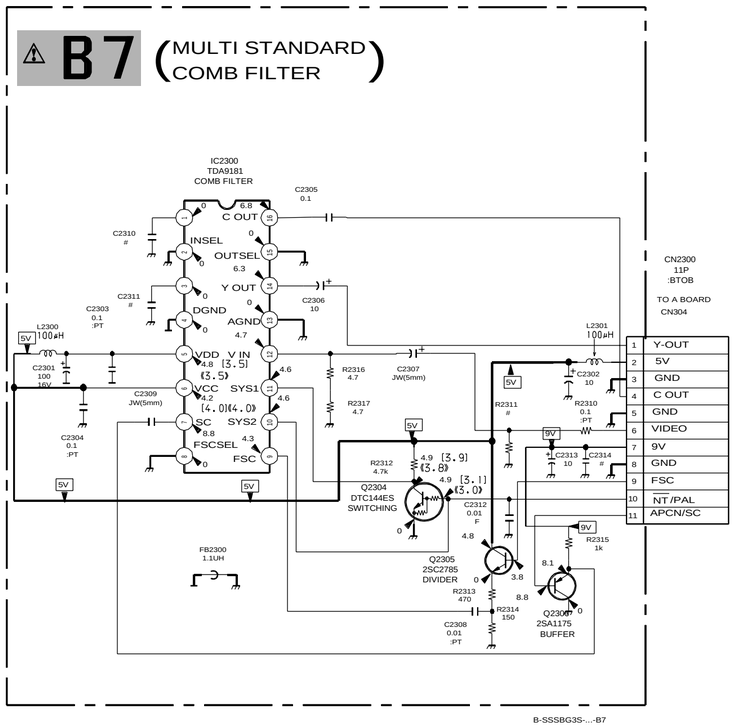
KV-XS29N90/XS29N93
RM-914

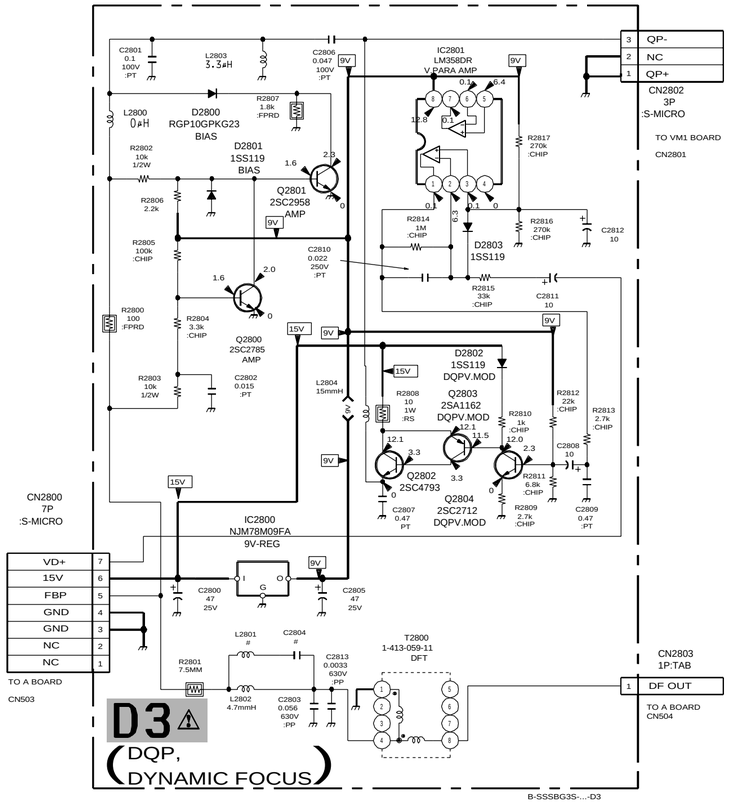
B5 BOARD ✻ MARK LIST

	KV-XS29N93	KV-XS29N90
C1515	47 :CHIP	#
C1517	0.47 25 :CHIP	#
C1518	47	#
C1520	82 :CHIP	#
C1522	0.47 25 :CHIP	#
C1523	150 :CHIP	#
C1524	38 :CHIP	#
C1525	82 :CHIP	#
C1526	82 :CHIP	#
C1528	0.47 25 :CHIP	#
C1529	150 :CHIP	#
C1530	68 :CHIP	#
CN1501	8P	#
CN1502	4P	#
D1501	UDZS-TE17-91B	#
IC1502	HEF4053BT	#
JR5800	#	0 :CHIP
JR5801	#	0 :CHIP
JW1508	JW (5)	#
L1506	100	#
L1507	47	#
L1508	47	#
L1509	100	#
L1510	47	#
L1511	47	#
Q1501	2SC2712-YG-TE85L	#
Q1502	2SC2712-YG-TE85L	#
Q1503	2SC2712-YG-TE85L	#
Q1505	2SC2712-YG-TE85L	#
Q1507	2SC2712-YG-TE85L	#
Q1509	2SC2712-YG-TE85L	#
Q1510	2SC2712-YG-TE85L	#
Q1511	2SC2712-YG-TE85L	#
Q1514	2SC2712-YG-TE85L	#
Q1515	2SC2712-YG-TE85L	#
Q1516	2SC2712-YG-TE85L	#
Q1520	2SC2712-YG-TE85L	#
Q1522	2SC2712-YG-TE85L	#
Q1523	2SC2712-YG-TE85L	#

	KV-XS29N93	KV-XS29N90
R1506	100 :CHIP	#
R1507	22 :CHIP	#
R1508	10 :CHIP	#
R1511	220 :CHIP	#
R1512	15 :CHIP	#
R1515	470 :CHIP	#
R1516	100 :CHIP	#
R1517	12 :CHIP	#
R1520	18 :CHIP	#
R1522	1 :CHIP	#
R1523	1 :CHIP	#
R1528	220 :CHIP	#
R1529	15 :CHIP	#
R1531	380 :CHIP	#
R1537	470 :CHIP	#
R1538	470 :CHIP	#
R1540	1 :CHIP	#
R1541	470 :CHIP	#
R1542	470 :CHIP	#
R1543	1 :CHIP	#
R1545	470 :CHIP	#
R1547	1 :CHIP	#
R1548	100 :CHIP	#
R1549	12 :CHIP	#
R1551	22 :CHIP	#
R1552	1 :CHIP	#
R1553	1 :CHIP	#
R1554	220 :CHIP	#
R1556	1 :CHIP	#
R1559	470 :CHIP	#
R1560	470 :CHIP	#
R1561	470 :CHIP	#
R1562	1 :CHIP	#
R1563	470 :CHIP	#
R1566	470 :CHIP	#
R1567	1 :CHIP	#
R1568	470 :CHIP	#
R1569	1 :CHIP	#

Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.

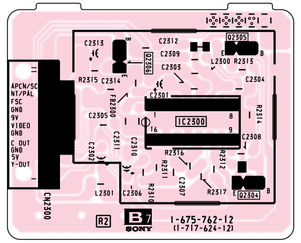




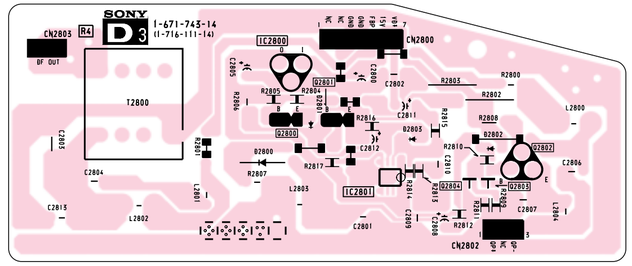
B7 [MULTI STANDARD, COMB FILTER] **D3** [DQP, DYNAMIC FOCUS]

PRINTED WIRING BOARDS

– B7 Board –



– D3 Board –

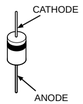


Schematic diagrams
← B7 D3 boards

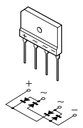
5-5. SEMICONDUCTORS

DIODE

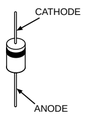
AK04V0
AU-01Z-V1
D2L20U
EL1Z
ERA22-08
GP08D
HSS83TD
NNCD9.1A-T1
RD33EB3T
RGP02-17EL-6433



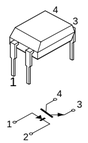
D3SB60



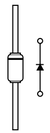
ERC04-06S
RN4Z
RS3FS
RU4AM-T4



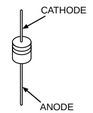
ON3171-R



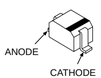
RD9.1ES-L2



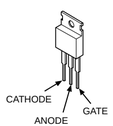
D1NS4
D1N20R
RD5.1ES-B3
RD6.8ES-B1
RD11ES-B3
RD20ES-B2
RD30ESB2
RD39ES-B2
1SS119-25



DTZ10B
DTZ-TT11-15B
UDZS-TE17-5.1B
UDZS-TE17-9.1B
MA111-(K8).S0
RD7.5SB1-T1
1SS355TE-17

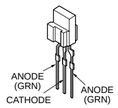


5P6M



LED

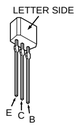
SPB-26MVWF



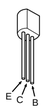
TRANSISTOR

UN2111
UN2211
UN2213
2SA1162-G
2SC2712-YG
2SD2114K

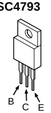
DTC144ESA
2SA1175-HFE
2SC2785-HFE



2SA1091-0

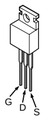


2SA1606-E
2SC4159-E
2SC4793



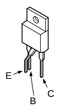
2SC2458-YGR
2SD2144S-UVW

IRF614

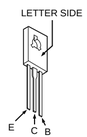


2SK246-GR

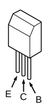
2SK2845-LB102



2SC2958



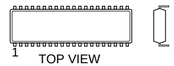
2SC2688-LK



KV-XS29N90/XS29N93
RM-914

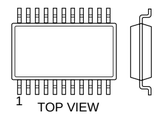
IC

CXA1315M (16PIN)
CXA1315P (16PIN)
CXA1855S (48PIN)
CXA2139S (48PIN)
CXP750097-024S (64PIN)
NJM2150D (20PIN)
NJM2187L (30PIN)
M24C08-BN6 (8PIN)
STV5112 (15PIN)
TDA7481 (15PIN)
TDA9181 (32PIN)



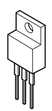
Dual In-line Package
Pin 6—98

HEF4053BT
LM358D (8PIN)
MM1319AFBE (7PIN)
NJM2903M (8PIN)
NJU4066BM (14PIN)
TDA7315D013TR (20PIN)
μPC4558G2 (8PIN)



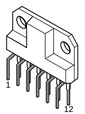
Single In -line Package
Pin 6—98

NJM78M09FA
TA7805S

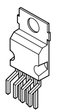


SE-135N

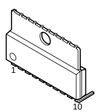
TA8200AH



TDA8172

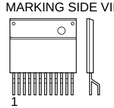


LA6510



STR-F6656

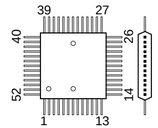
MARKING SIDE VIEW



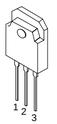
Zig-zag In -line Package
Pin 6—99

RU-1P

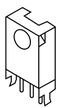
MARKING SIDE
VIEW



2SD2578-CA



SBX3081-01(30)



SECTION 6
EXPLODED VIEWS

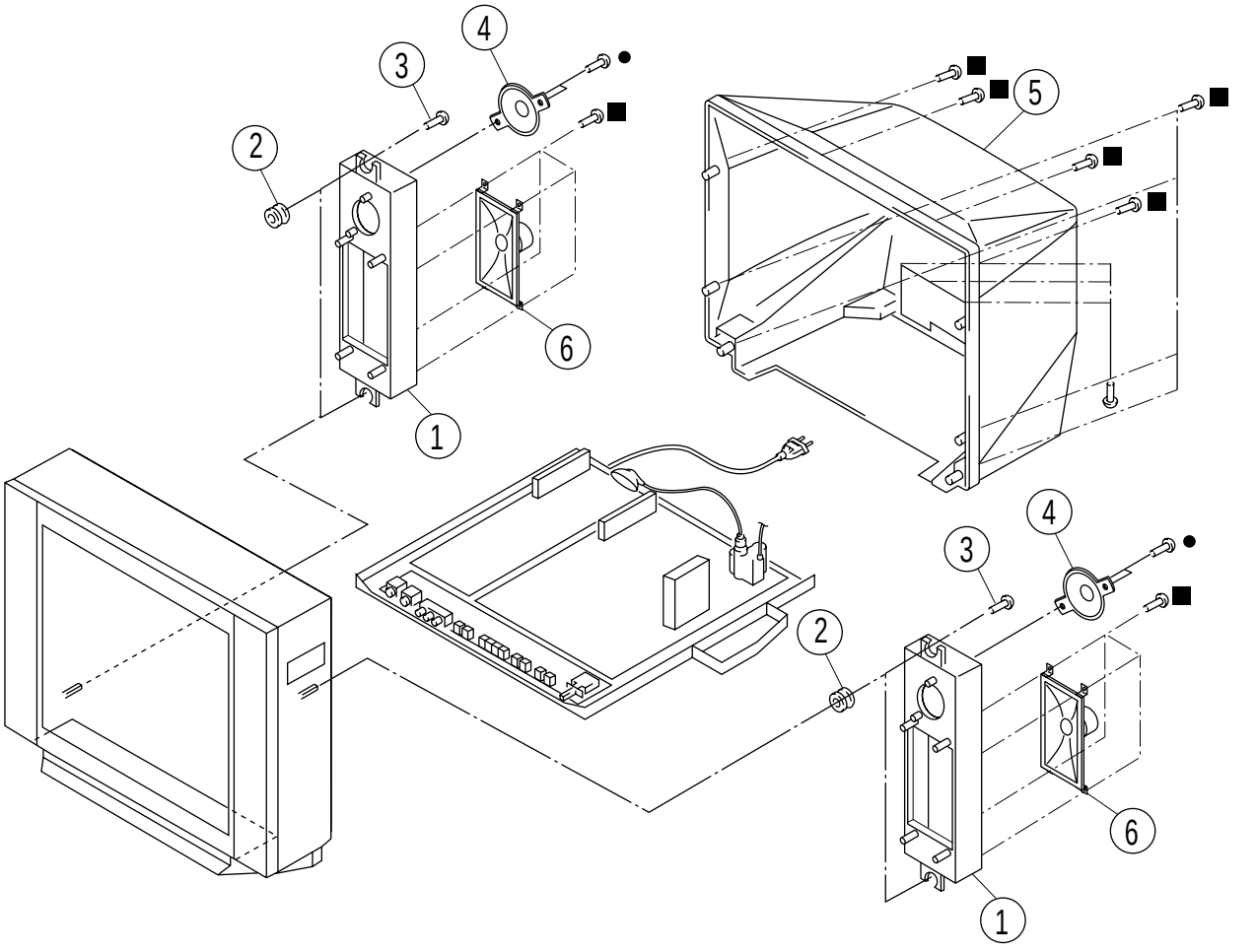
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. SPEAKER BRACKET

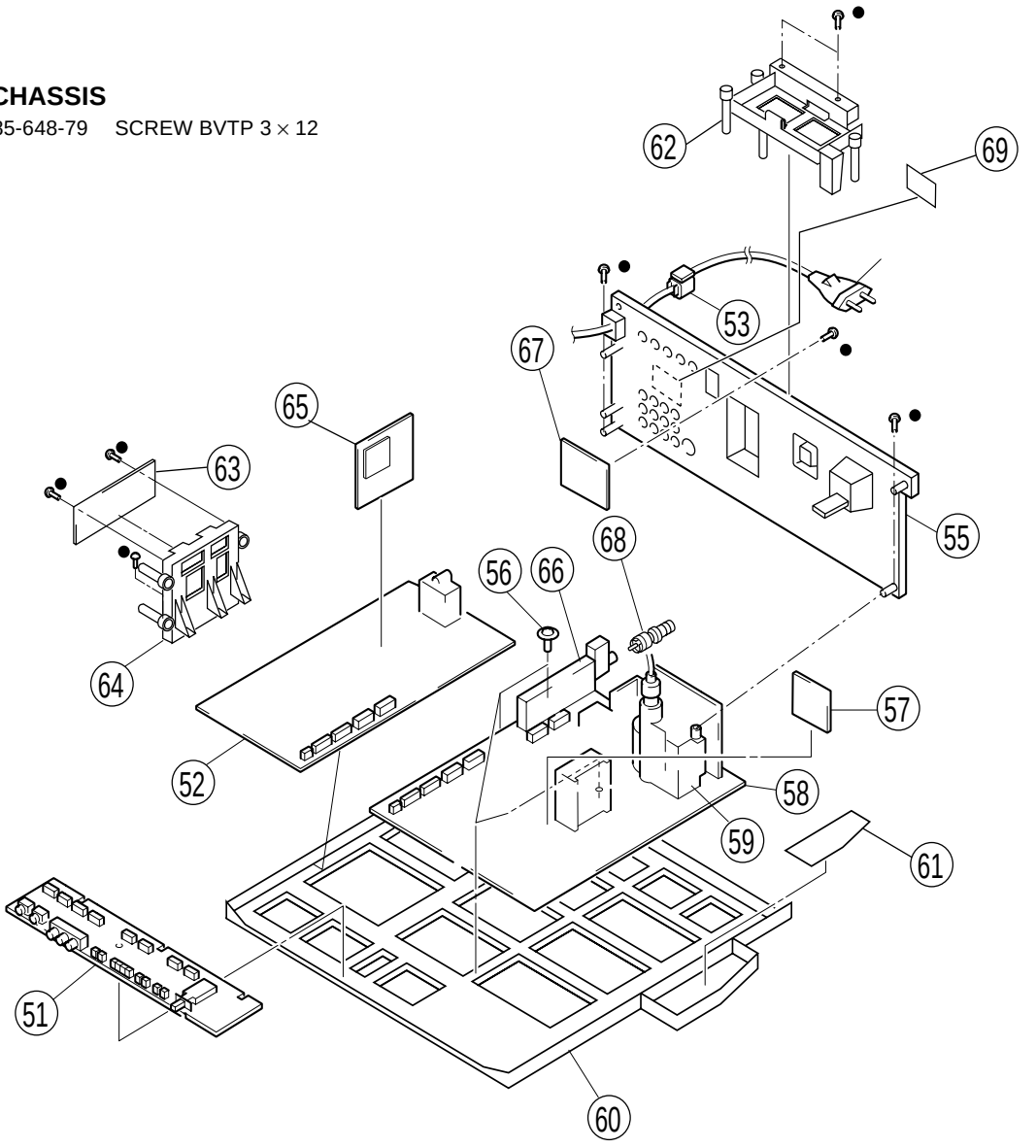
■: 7-685-663-71 SCREW +BVTP 4 × 16
●: 7-685-648-79 SCREW BVTP 3 × 12



REF. NO.		PART NO.	DESCRIPTION	REMARK
1	*	4-070-757-01	BRACKET, SP	
2		4-374-745-21	CUSHION (A)	
3		4-302-404-03	SCREW (WASHER HEAD) (+P 4X16)	
4		1-529-190-11	SPEAKER (5CM)	
5	⚠	4-065-506-02	COVER, REAR	
6		1-529-563-11	SPEAKER (15X6.5CM)	

6-2. CHASSIS

●: 7-685-648-79 SCREW BVTP 3 × 12

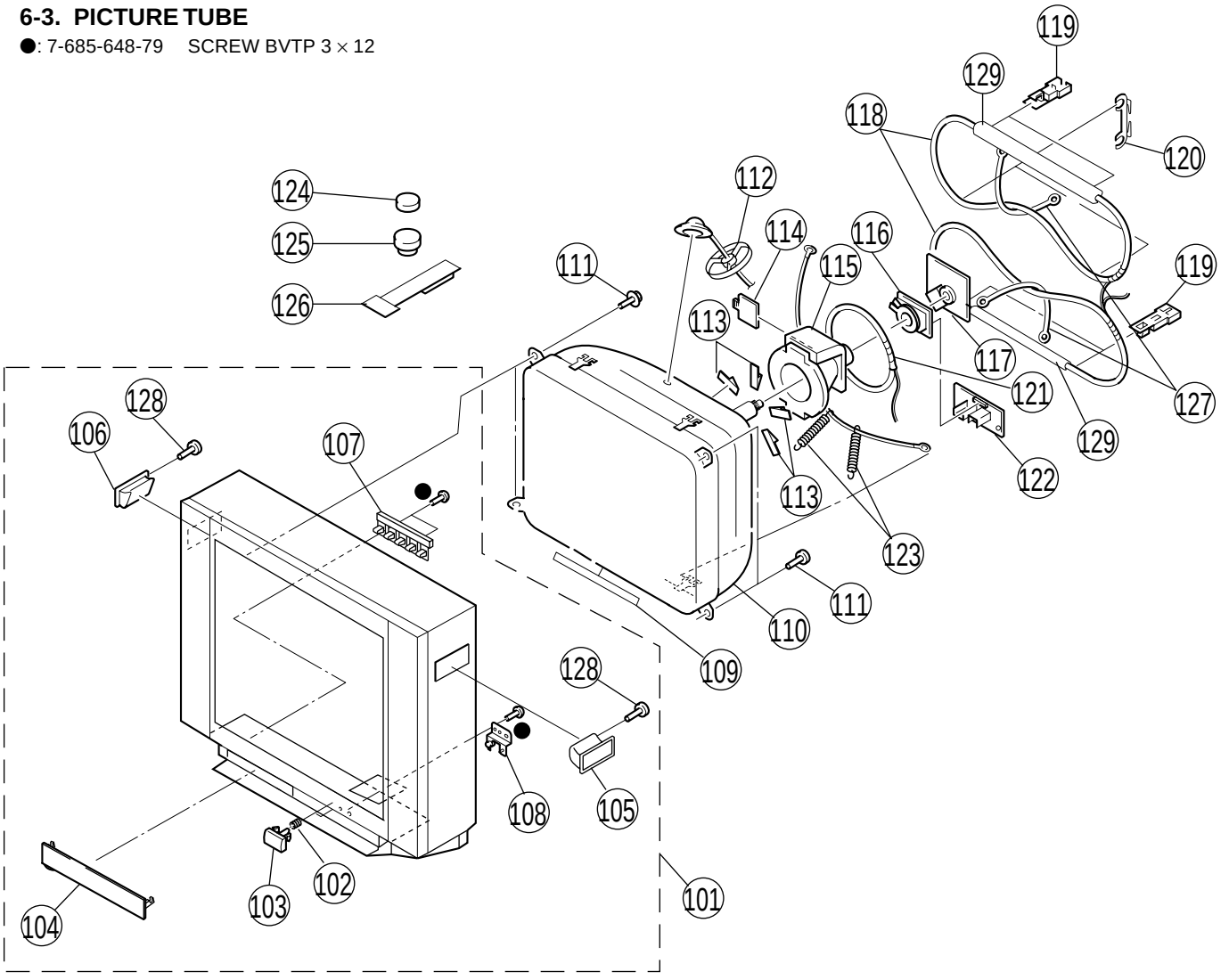


REF. NO.		PART NO.	DESCRIPTION	REMARK
51	*	A-1372-755-A	H5 BOARD MOUNTED (KV-XS29N90)	
	*	A-1372-756-A	H5 BOARD MOUNTED (KV-XS29N93)	
52	*	A-1136-055-A	B3 BOARD COMPLETE (KV-XS29N90)	
	*	A-1136-101-A	B3 BOARD COMPLETE (KV-XS29N93)	
53		4-022-115-00	HOLDER, AC CORD	
54	⚠	1-575-023-11	CORD, POWER (WITH CONNECTOR) 6A/250V	
55	*	4-066-684-22	BRACKET, TERMINAL (KV-XS29N90)	
	*	4-066-684-81	BRACKET, TERMINAL (KV-XS29N93)	
56		4-046-797-01	SCREW (3X12), (+)BVTAP	
57	*	A-1131-500-A	B7 BOARD MOUNTED	
58	*	A-1299-226-A	A BOARD COMPLETE (KV-XS29N90)	
	*	A-1299-227-A	A BOARD COMPLETE (KV-XS29N93)	
59	⚠	1-453-284-11	TRANSFORMER ASSY, FLYBACK (NX-4009//M3I4)	

REF. NO.		PART NO.	DESCRIPTION	REMARK
60	*	4-066-681-04	BRACKET, MAIN	
61	*	A-1343-745-A	D3 BOARD MOUNTED	
62	*	4-066-683-11	HOLDER, PWB	
63	*	A-1241-384-A	F BOARD MOUNTED	
64	*	4-066-682-01	BRACKET, F PWB	
65	*	A-1131-532-A	B5 BOARD MOUNTED (KV-XS29N93)	
	*	A-1131-506-A	B5 BOARD MOUNTED (KV-XS29N90)	
66		8-598-477-20	TUNER, FSS BTF-WG411	
67		A-1388-266-A	J4 BOARD COMPLETE (KV-XS29N93)	
68		1-573-657-21	PLUG, F PIN	
69		4-069-820-02	LABEL, TERMINAL (KV-XS29N90)	

6-3. PICTURE TUBE

●: 7-685-648-79 SCREW BVTP 3 × 12

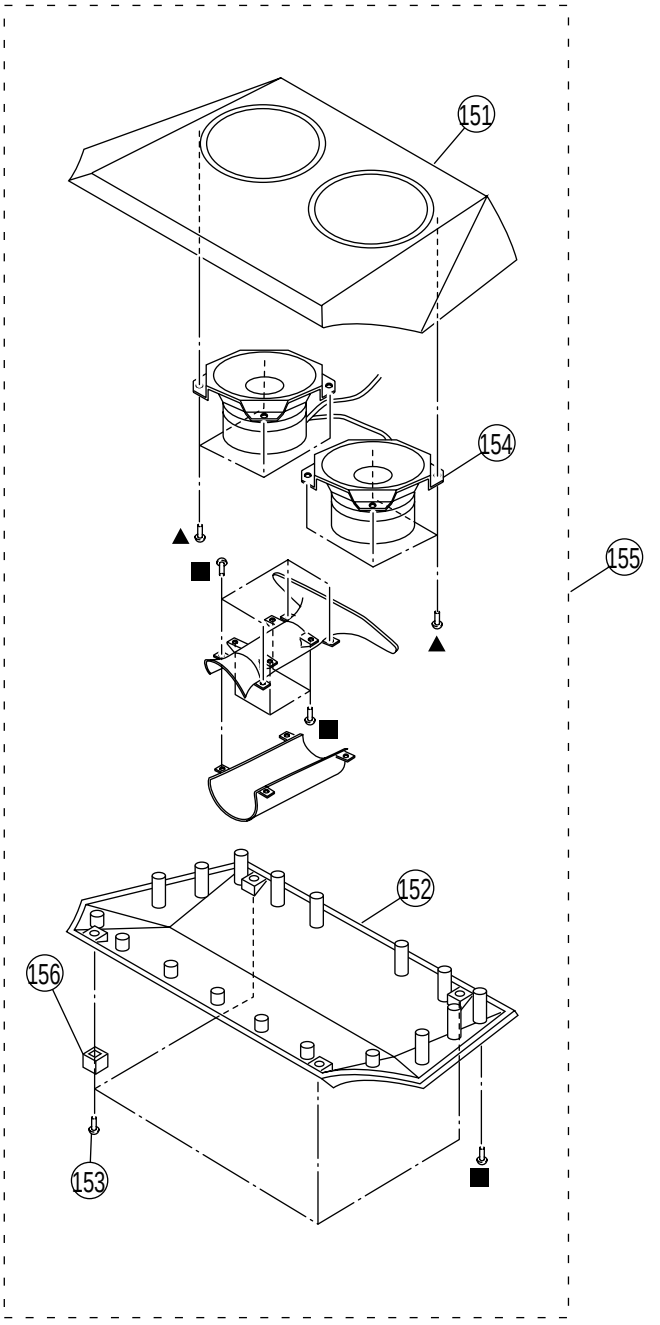


REF. NO.		PART NO.	DESCRIPTION	REMARK
101		X-4037-744-2	BEZNET, ASSY (KV-XS29N90) 102-108, 128	
		X-4037-745-2	BEZNET, ASSY (KV-XS29N93) 102-108, 128	
102		4-036-405-11	SPRING, COMPRESSION	
103		4-070-752-01	BUTTON, POWER	
104		4-076-352-01	CONTROL, DOOR	
105		X-4035-862-4	HANDLE ASSY (R)	
106		X-4035-861-4	HANDLE ASSY (L)	
107		4-070-753-01	BUTTON, MULTI	
108	*	4-070-755-01	BAR, OPTICAL	
109		4-072-569-11	SHEET, BLOTTING	
110	⚠	8-735-057-05	PICTURE TUBE (M68LNH070X)	
111		4-046-765-12	SCREW, TAPPING 7+CROWN WASHER	
112	*	3-704-372-11	HOLDER, HV CABLE	
113		4-046-600-11	SPACER, DY	
114		2-163-920-01	PLATE, TLH CORRECTION	
115	⚠	8-451-494-31	DEFLECTION YOKE (Y29RSA-S)	
116		8-453-011-11	NA299-M	

REF. NO.		PART NO.	DESCRIPTION	REMARK
117	*	A-1331-999-A	C BOARD MOUNTED	
118	⚠	1-419-519-11	COIL, DEMAGNETIC	
119	*	4-062-970-11	CLIP (29RSN), DGC	
120		4-064-883-03	HOLDER, DGC	
121		1-452-896-11	COIL, NA ROTATION (RT200)	
122	*	A-1342-530-A	VM BOARD MOUNTED	
123		4-369-318-61	SPRING, TENSION	
124		1-452-032-00	MAGNET,DISC	
125		1-452-014-11	CIRCULAR DISC MAGNET B	
126		X-4387-214-3	PERMALOY ASSY, CORRECTION	
127		4-068-028-32	BAND, DGC	
128		4-058-870-01	SCREW, (4X16) W (+) P TAPPING	
129		4-063-935-11	CUSHION (50X550) DGC	

6-4. 3D SPEAKER (KV-XS29N93)

■: 7-685-663-71 SCREW BVTP 4 × 16
▲: 7-685-661-14 SCREW BVTP 4 × 12



REF. NO.	PART NO.	DESCRIPTION	REMARK
151	4-068-694-01	TOP COVER, 3D BOX	
152	4-068-695-01	BOTTOM, 3D BOX	
153	4-302-428-03	SCREW (WASHER HEAD), (+P 3X12)	
154	1-529-172-11	SPEAKER, (10CM)	
155	A-1501-377-C	BOX ASSY, SPEAKER (3D)	
156	4-037-244-01	FOOT	

SECTION 7
ELECTRICAL PARTS LIST

A

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : µF, PF : µµF

COILS
- MMH : mH, UH : µH

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1299-226-A	A BOARD COMPLETE (KV-XS29N90)			
	* A-1299-227-A	A BOARD COMPLETE (KV-XS29N93)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	4-382-854-21	SCREW (M3X14), P, SW (+)			
		<CAPACITOR>			
C004	1-163-001-11	CERAMIC CHIP	220PF	10.00% 50V	
C005	1-163-001-11	CERAMIC CHIP	220PF	10.00% 50V	
C006	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C007	1-104-664-11	ELECT	47UF	20.00% 16V	
C013	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V	
C014	1-104-664-11	ELECT	47UF	20.00% 25V	
C015	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V	
C016	1-163-243-11	CERAMIC CHIP	47PF	5.00% 50V	
C017	1-163-113-00	CERAMIC CHIP	68PF	5.00% 50V	
C019	1-104-664-11	ELECT	47UF	20.00% 25V	
C022	1-163-227-11	CERAMIC CHIP	10PF	0.50PF 50V	
C023	1-163-227-11	CERAMIC CHIP	10PF	0.50PF 50V	
C024	1-163-227-11	CERAMIC CHIP	10PF	0.50PF 50V	
C026	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C027	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C028	1-163-037-11	CERAMIC CHIP	0.022UF	10.00% 50V	
C030	1-126-965-11	ELECT	22UF	20.00% 50V	
C031	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C032	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V	
C034	1-163-031-11	CERAMIC CHIP	0.01UF	50V	
C041	1-163-251-11	CERAMIC CHIP	100PF	5.00% 50V	
C042	1-163-251-11	CERAMIC CHIP	100PF	5.00% 50V	
C044	1-163-251-11	CERAMIC CHIP	100PF	5.00% 50V	
C047	1-163-251-11	CERAMIC CHIP	100PF	5.00% 50V	
C101	1-126-964-11	ELECT	10UF	20.00% 50V	
C103	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C104	1-104-665-11	ELECT	100UF	20.00% 10V	
C106	1-163-035-00	CERAMIC CHIP	0.047UF	50V	
C107	1-163-005-11	CERAMIC CHIP	470PF	10.00% 50V	
C108	1-104-664-11	ELECT	47UF	20.00% 16V	
C109	1-163-005-11	CERAMIC CHIP	470PF	10.00% 50V	
C110	1-163-005-11	CERAMIC CHIP	470PF	10.00% 50V	
C111	1-163-005-11	CERAMIC CHIP	470PF	10.00% 50V	
C112	1-104-664-11	ELECT	47UF	20.00% 16V	
C113	1-104-664-11	ELECT	47UF	20.00% 25V	
C114	1-126-967-11	ELECT	47UF	20.00% 50V	
C300	1-164-505-11	CERAMIC CHIP	2.2UF	16V	
C301	1-126-935-11	ELECT	470UF	20.00% 16V	
C302	1-163-005-11	CERAMIC CHIP	470PF	10.00% 50V	
C303	1-126-959-11	ELECT	0.47UF	20.00% 50V	
C304	1-126-967-11	ELECT	47UF	20.00% 50V	
C305	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C306	1-163-233-11	CERAMIC CHIP	18PF	5.00% 50V	
C307	1-163-233-11	CERAMIC CHIP	18PF	5.00% 50V	
C308	1-163-259-91	CERAMIC CHIP	220PF	5.00% 50V	
C309	1-126-957-11	ELECT	0.22UF	20.00% 50V	
C311	1-126-964-11	ELECT	10UF	20.00% 50V	
C312	1-164-346-11	CERAMIC CHIP	1UF	16V	
C313	1-164-346-11	CERAMIC CHIP	1UF	16V	
C314	1-164-346-11	CERAMIC CHIP	1UF	16V	
C315	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C316	1-126-934-11	ELECT	220UF	20.00% 16V	
C317	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C318	1-163-031-11	CERAMIC CHIP	0.01UF	50V	
C319	1-163-031-11	CERAMIC CHIP	0.01UF	50V	
C320	1-163-031-11	CERAMIC CHIP	0.01UF	50V	
C321	1-164-489-11	CERAMIC CHIP	0.22UF	10.00% 16V	
C322	1-163-005-11	CERAMIC CHIP	470PF	10.00% 50V	
C324	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V	
C325	1-126-960-11	ELECT	1UF	20.00% 50V	
C327	1-126-965-11	ELECT	22UF	20.00% 50V	
C328	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C330	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C331	1-126-963-11	ELECT	4.7UF	20.00% 50V	
C332	1-126-963-11	ELECT	4.7UF	20.00% 50V	
C335	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C336	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
C337	1-126-961-11	ELECT	2.2UF	20.00% 50V	
C338	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V	
C341	1-115-340-11	CERAMIC CHIP	0.22UF	10.00% 25V	
C342	1-163-259-91	CERAMIC CHIP	220PF	5.00% 50V	
C502	1-163-145-00	CERAMIC CHIP	0.0015UF	5.00% 50V	
C503	1-126-964-11	ELECT	10UF	20.00% 50V	
C506	1-107-638-11	ELECT	33UF	20.00% 160V	
C507	1-161-830-00	CERAMIC	0.0047UF	500V	
C510	1-102-112-00	CERAMIC	330PF	10.00% 50V	
C513	1-163-263-11	CERAMIC CHIP	330PF	5.00% 50V	
C514	1-106-383-00	MYLAR	0.047UF	10.00% 200V	
C517	1-164-182-11	CERAMIC CHIP	0.0033UF	10.00% 50V	
C518	1-104-665-11	ELECT	100UF	20.00% 10V	
C519	1-102-212-00	CERAMIC	820PF	10.00% 500V	
C521	1-126-934-11	ELECT	220UF	20.00% 16V	
C522	1-126-933-11	ELECT	100UF	20.00% 16V	
C523	1-102-002-00	CERAMIC	680PF	10.00% 500V	
C524	1-126-967-11	ELECT	47UF	20.00% 50V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF. NO.		PART NO.	DESCRIPTION			REMARK
C526		1-130-495-00	MYLAR	0.1UF	5.00%	50V
C527		1-102-820-00	CERAMIC	330PF	5.00%	50V
C528		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C530		1-137-372-11	MYLAR	0.022UF	5.00%	50V
C531		1-107-903-11	ELECT	2.2UF	20.00%	50V
C532		1-126-941-11	ELECT	470UF	20.00%	25V
C533		1-126-941-11	ELECT	470UF	20.00%	25V
C536		1-136-165-00	MYLAR	0.1UF	5.00%	50V
C537		1-126-969-11	ELECT	220UF	20.00%	50V
C538		1-127-717-11	CAP, METALIZED PP FILM		19000PF	
C539		1-129-723-00	FILM	0.056UF	5.00%	630V
C540		1-136-171-00	MYLAR	0.33UF	5.00%	50V
C546		1-165-319-11	CERAMIC CHIP	0.1UF		50V
C549		1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C550		1-106-220-00	MYLAR	0.1UF	10.00%	100V
C551		1-126-960-11	ELECT	1UF	20.00%	50V
C552		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C553		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C554		1-137-417-11	MYLAR	0.0047UF	10.00%	200V
C556		1-126-941-11	ELECT	470UF	20.00%	25V
C557		1-126-941-11	ELECT	470UF	20.00%	25V
C558		1-123-024-21	ELECT	33UF		160V
C560		1-102-228-00	CERAMIC	470PF	10.00%	500V
C561		1-129-898-00	FILM	0.0022UF	5.00%	630V
C562		1-102-228-00	CERAMIC	470PF	10.00%	500V
C564		1-163-038-91	CERAMIC CHIP	0.1UF		25V
C565		1-107-655-11	ELECT	47UF	20.00%	250V
C566		1-102-244-00	CERAMIC	220PF	10.00%	500V
C567		1-115-520-11	FILM	0.68UF	5.00%	250V
C568		1-102-228-00	CERAMIC	470PF	10.00%	500V
C570		1-115-522-11	FILM	1UF	5.00%	250V
C572		1-117-661-21	FILM	0.15UF	5.00%	250V
C573		1-106-387-00	MYLAR	0.068UF	10.00%	200V
C574		1-104-709-11	ELECT	4.7UF		160V
C576		1-130-495-00	MYLAR	0.1UF	5.00%	50V
C577		1-106-395-00	MYLAR	0.15UF	10.00%	200V
C582		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C584		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C586		1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C600	⚠	1-104-705-11	MYLAR	0.1UF	20.00%	250V
C601		1-130-202-00	FILM	0.022UF	5.00%	400V
C602	⚠	1-104-705-11	MYLAR	0.1UF	20.00%	250V
C603		1-104-664-11	ELECT	47UF	20.00%	25V
C604		1-163-009-11	CERAMIC CHIP	0.001UF	10.00%	50V
C605	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C606	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C607		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C608		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C609		1-126-968-11	ELECT	100UF	20.00%	50V
C610		1-126-964-11	ELECT	10UF	20.00%	50V
C611		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C612		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C613		1-113-611-11	ELECT(BLOCK)	820UF	20.00%	250V
C614		1-126-964-11	ELECT	10UF	20.00%	50V
C615	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C618		1-125-893-11	FILM	680PF	3.00%	1.5KV
C619	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V

REF. NO.		PART NO.	DESCRIPTION			REMARK
C620		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C621		1-102-114-00	CERAMIC	470PF	10.00%	50V
C622		1-102-119-00	CERAMIC	0.0015UF	10.00%	50V
C623		1-104-665-11	ELECT	100UF	20.00%	25V
C624		1-125-772-91	CERAMIC	1500PF	10.00%	2KV
C625		1-102-002-00	CERAMIC	680PF	10.00%	500V
C626		1-102-002-00	CERAMIC	680PF	10.00%	500V
C627		1-102-002-00	CERAMIC	680PF	10.00%	500V (KV-XS29N93)
C628		1-126-952-11	ELECT	1000UF	20.00%	35V (KV-XS29N93)
C629		1-126-964-11	ELECT	10UF	20.00%	50V
C630		1-124-347-51	ELECT	100UF	20.00%	160V
C631		1-128-550-11	ELECT	2200UF	20.00%	50V
C632		1-128-339-11	ELECT	2200UF	20.00%	16V
C633		1-104-999-11	MYLAR	0.1UF	10.00%	200V
C634		1-126-933-11	ELECT	100UF	20.00%	16V
C635		1-104-665-11	ELECT	100UF	20.00%	10V
C636		1-104-760-11	CERAMIC CHIP	0.047UF	10.00%	50V
C638		1-161-830-00	CERAMIC	0.0047UF		500V
C641		1-102-002-00	CERAMIC	680PF	10.00%	500V
C642		1-126-943-11	ELECT	2200UF	20.00%	25V
C643		1-104-665-11	ELECT	100UF	20.00%	10V
C644		1-104-331-11	CERAMIC	0.0022UF	10.00%	1KV
C645		1-137-605-11	MYLAR	0.01UF	10.00%	250V
C646		1-107-679-91	ELECT	10UF	20.00%	450V
C647		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C649		1-126-940-11	ELECT	330UF	20.00%	25V
C650		1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C651		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C652		1-126-965-11	ELECT	22UF	20.00%	50V
C653		1-104-664-11	ELECT	47UF	20.00%	25V
C655	⚠	1-119-886-51	CERAMIC	470PF	10.00%	250V
C657		1-101-821-00	CERAMIC	0.0022UF		500V
C912		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C913		1-104-665-11	ELECT	100UF	20.00%	10V

<CONNECTOR>

CN101	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN102	*	1-779-889-11	CONNECTOR, BOARD TO BOARD 8P
CN104		1-695-915-11	TAB (CONTACT)
CN105	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P
CN106	*	1-564-506-11	PLUG, CONNECTOR 3P
CN201	*	1-564-508-11	PLUG, CONNECTOR 5P
CN202	*	1-508-847-00	PIN, CONNECTOR 4P
CN303	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN304	*	1-766-955-11	CONNECTOR, BOARD TO BOARD 11P
CN305	*	1-564-509-11	PLUG, CONNECTOR 6P
CN501	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P
CN502	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P
CN503	*	1-564-510-11	PLUG, CONNECTOR 7P
CN504		1-695-915-11	TAB (CONTACT)
CN505		1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P
CN507	*	1-564-509-11	PLUG, CONNECTOR 6P
CN508		1-695-915-11	TAB (CONTACT)
CN601	*	1-580-843-11	PIN, CONNECTOR (POWER)

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REF. NO.		PART NO.	DESCRIPTION	REMARK
CN602	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN603	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN604	*	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
CN605	*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)	
CN608	*	1-564-507-11	PLUG, CONNECTOR 4P	
CN904	*	1-564-512-11	PLUG, CONNECTOR 9P	
			<DIODE>	
D001		8-719-988-61	DIODE 1SS355TE-17	
D002		8-719-988-61	DIODE 1SS355TE-17	
D004		1-216-295-91	SHORT 0	
D005		8-719-988-61	DIODE 1SS355TE-17	
D006		1-216-295-91	SHORT 0	
D300		1-216-295-91	SHORT 0	
D301		8-719-988-61	DIODE 1SS355TE-17	
D303		8-719-988-61	DIODE 1SS355TE-17	
D304		8-719-988-61	DIODE 1SS355TE-17	
D305		8-719-988-61	DIODE 1SS355TE-17	
D306		8-719-988-61	DIODE 1SS355TE-17	
D307		8-719-988-61	DIODE 1SS355TE-17	
D308		8-719-988-61	DIODE 1SS355TE-17	
D309		8-719-159-10	DIODE RD5.1SB-T1	
D309		8-719-069-54	DIODE UDZS-TE17-5.1B	
D311		8-719-988-61	DIODE 1SS355TE-17	
D312		8-719-988-61	DIODE 1SS355TE-17	
D313		8-719-988-61	DIODE 1SS355TE-17	
D315		8-719-988-61	DIODE 1SS355TE-17	
D316		8-719-037-06	DIODE RD7.5SB1-T1	
D319		8-719-069-60	DIODE UDZS-TE17-9.1B	
D320		8-719-069-60	DIODE UDZS-TE17-9.1B	
D321		8-719-069-60	DIODE UDZS-TE17-9.1B	
D322		8-719-069-60	DIODE UDZS-TE17-9.1B	
D504		8-719-302-43	DIODE RGP10GPKG23	
D505		8-719-988-61	DIODE 1SS355TE-17	
D506		8-719-911-19	DIODE 1SS119-25TD	
D507		8-719-988-61	DIODE 1SS355TE-17	
D508		8-719-988-61	DIODE 1SS355TE-17	
D509		1-216-073-00	RES-CHIP 10K 5% 1/10W	
D510		8-719-988-61	DIODE 1SS355TE-17	
D511		8-719-988-61	DIODE 1SS355TE-17	
D512		8-719-988-61	DIODE 1SS355TE-17	
D513		8-719-908-03	DIODE GP08DPKG23	
D517		8-719-312-71	DIODE RS3FS	
D518		8-719-074-35	DIODE RU4AM-T4	
D519		8-719-312-71	DIODE RS3FS	
D521		8-719-302-43	DIODE RGP10GPKG23	
D522		8-719-028-45	DIODE D2L20U-F	
D523		8-719-302-43	DIODE RGP10GPKG23	
D527		8-719-908-03	DIODE GP08DPKG23	
D528		8-719-908-03	DIODE GP08DPKG23	
D531		8-719-988-61	DIODE 1SS355TE-17	
D532		8-719-988-61	DIODE 1SS355TE-17	
D534		8-719-988-61	DIODE 1SS355TE-17	
D600		8-719-911-19	DIODE 1SS119-25TD	
D602		8-719-911-19	DIODE 1SS119-25TD	
D603		8-719-150-92	DIODE RD33ES-T1B2	

REF. NO.		PART NO.	DESCRIPTION	REMARK
D604		8-719-028-72	DIODE RGP02-17PKG23	
D605		8-719-510-22	DIODE D3SB60	
D606		8-719-108-18	DIODE TF541M	
D607		8-719-073-01	DIODE MA111-TX	
D608		8-719-110-53	DIODE RD20ES-T1B2	
D610		8-719-043-76	DIODE AK04V0	
D611		8-719-046-74	DIODE AU-01Z-V1	
D613		8-719-046-74	DIODE AU-01Z-V1	
D614		8-719-046-74	DIODE AU-01Z-V1	
D615		8-719-074-35	DIODE RU4AM-T4	
D616		8-719-067-18	DIODE RN4Z	
D617		8-719-067-18	DIODE RN4Z	
D618		8-719-067-18	DIODE RN4Z (KV-XS29N93)	
D620		8-719-110-72	DIODE RD30ES-T1B1	
D623		8-719-978-65	DIODE UDZ-TE-17-15B	
D624		8-719-073-01	DIODE MA111-TX	
D625		8-719-977-28	DIODE UDZS-TE17-10B	
D627		8-719-067-18	DIODE RN4Z	
D628		8-719-911-19	DIODE 1SS119-25TD	
D631		8-719-068-00	DIODE ERC04-06SE	
D632		8-719-068-00	DIODE ERC04-06SE	
D633		8-719-948-45	DIODE ERA22-08TP3	
D634		8-719-073-01	DIODE MA111-TX	
D635		8-719-073-01	DIODE MA111-TX	
D636		8-719-510-02	DIODE D1NS4-TA2	
D637		8-719-109-96	DIODE RD6.8ES-T1B1	
D638		8-719-510-48	DIODE D1N20R-TR	
			<CONNECTOR>	
DY1	*	1-580-798-11	CONNECTOR PIN (DY) 6P	
			<FERRITE BEAD>	
FB501		1-410-397-21	FERRITE 1.1UH	
FB502		1-410-397-21	FERRITE 1.1UH	
FB600		1-410-397-21	FERRITE 1.1UH	
FB601		1-410-397-21	FERRITE 1.1UH	
FB602		1-410-397-21	FERRITE 1.1UH	
FB603		1-410-397-21	FERRITE 1.1UH	
FB604		1-412-911-31	FERRITE 0UH	
FB605		1-412-911-31	FERRITE 0UH	
FB606		1-412-911-31	FERRITE 0UH	
FB607		1-410-397-21	FERRITE 1.1UH (KV-XS29N93)	
FB608		1-412-911-31	FERRITE 0UH	
FB611		1-410-397-21	FERRITE 1.1UH	
FB612		1-410-397-21	FERRITE 1.1UH	
FB615		1-410-397-21	FERRITE 1.1UH	
			<IC>	
IC001		8-752-914-80	IC CXP750097-024S	
IC002		8-759-371-21	IC MM1319AFBE	
IC003		8-759-527-71	IC M24C08-BN6	
IC301		8-752-090-41	IC CXA2139S	
IC502		8-759-700-07	IC NJM2903M-TE2	
IC503		8-759-980-58	IC TDA8172	
IC601		8-749-014-48	IC STR-F6656	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION		REMARK
IC602	8-749-920-61	IC SE-135N		
IC603	8-759-701-59	IC L7809CV		
IC604	8-759-231-53	IC L7805CV		
		<CHIP CONDUCTOR>		
JR001	1-216-295-91	SHORT	0	
JR002	1-216-295-91	SHORT	0	
JR004	1-216-295-91	SHORT	0	
JR005	1-216-295-91	SHORT	0	
JR006	1-216-295-91	SHORT	0	
JR008	1-216-295-91	SHORT	0	
JR010	1-216-295-91	SHORT	0	
JR012	1-216-295-91	SHORT	0	
JR014	1-216-295-91	SHORT	0	
JR015	1-216-295-91	SHORT	0	
JR016	1-216-295-91	SHORT	0	
JR107	1-216-295-91	SHORT	0	
JR108	1-216-295-91	SHORT	0	
JR111	1-216-295-91	SHORT	0	
JR204	1-216-295-91	SHORT	0	
JR308	1-216-295-91	SHORT	0	
JR309	1-216-295-91	SHORT	0	
JR500	1-216-295-91	SHORT	0	
JR501	1-216-295-91	SHORT	0	
JR502	1-216-295-91	SHORT	0	
JR503	1-216-295-91	SHORT	0	
JR600	1-216-295-91	SHORT	0	
		<COIL>		
L002	1-414-856-11	INDUCTOR	10UH	
L003	1-414-180-11	INDUCTOR	3.3UH	
L005	1-414-233-22	INDUCTOR CHIP	0UH	
L101	1-414-856-11	INDUCTOR	10UH	
L102	1-414-856-11	INDUCTOR	10UH	
L103	1-414-856-11	INDUCTOR	10UH	
L104	1-414-856-11	INDUCTOR	10UH	
L105	1-414-856-11	INDUCTOR	10UH	
L301	1-414-189-31	INDUCTOR	100UH	
L302	1-414-185-41	INDUCTOR	22UH	
L501	1-412-525-31	INDUCTOR	10UH	
L502	1-422-613-11	COIL, AIR CORE		
L503	1-412-525-31	INDUCTOR	10UH	
L504	1-412-525-31	INDUCTOR	10UH	
L507	1-459-111-00	INDUCTOR	10MH	
L511	1-406-977-71	INDUCTOR	0UH	
L513	1-412-551-31	INDUCTOR	1.5MH	
L515	1-459-104-00	COIL, WITH CORE		
L518	1-414-187-11	INDUCTOR	47UH	
L601	1-412-527-11	INDUCTOR	15UH	
L905	1-414-856-11	INDUCTOR	10UH	
		<PHOTO COUPLER>		
PH600 ⚠	8-749-924-35	PHOTO COUPLER ON3171-R		

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSISTOR>			
Q001	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q002	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q003	8-729-424-08	TRANSISTOR UN2111-TX			
Q004	8-729-421-22	TRANSISTOR UN2211-TX			
Q101	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q301	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q304	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q305	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q306	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q307	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q308	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q311	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q312	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q313	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q315	8-729-421-19	TRANSISTOR UN2213-TX			
Q501	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q502	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q503	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q505	8-729-931-45	TRANSISTOR IRF614			
Q506	8-729-119-80	TRANSISTOR 2SC2688-LK			
Q507	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q509	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q511	8-729-048-07	TRANSISTOR 2SD2578-CA			
Q600	8-729-119-78	TRANSISTOR 2SC2785TP-HFE			
Q601	8-729-023-22	TRANSISTOR 2SD2114KT146			
Q602	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q603	8-729-424-08	TRANSISTOR UN2111-TX			
Q604	8-729-200-17	TRANSISTOR 2SA1091R-TPE2			
Q605	8-729-044-30	TRANSISTOR 2SK2845-LB102			
Q606	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q607	8-729-922-37	TRANSISTOR 2SD2144S-TP-UVW			
Q608	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
		<RESISTOR>			
R001	1-414-233-22	INDUCTOR CHIP	0UH		
R002	1-216-025-91	RES-CHIP	100	5%	1/10W
R003	1-216-073-00	RES-CHIP	10K	5%	1/10W
R004	1-216-025-91	RES-CHIP	100	5%	1/10W
R005	1-216-025-91	RES-CHIP	100	5%	1/10W
R006	1-216-689-11	RES-CHIP	39K	5%	1/10W
R007	1-216-033-00	RES-CHIP	220	5%	1/10W
R008	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R009	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R010	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R011	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R012	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R013	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R014	1-216-025-91	RES-CHIP	100	5%	1/10W
R015	1-216-025-91	RES-CHIP	100	5%	1/10W
R018	1-216-033-00	RES-CHIP	220	5%	1/10W
R019	1-216-073-00	RES-CHIP	10K	5%	1/10W
R021	1-216-073-00	RES-CHIP	10K	5%	1/10W
R022	1-216-025-91	RES-CHIP	100	5%	1/10W
R023	1-216-049-91	RES-CHIP	1K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R024	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R025	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R026	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R027	1-216-049-91	RES-CHIP	1K	5%	1/10W
R028	1-216-049-91	RES-CHIP	1K	5%	1/10W
R029	1-216-049-91	RES-CHIP	1K	5%	1/10W
R030	1-216-025-91	RES-CHIP	100	5%	1/10W
R031	1-216-049-91	RES-CHIP	1K	5%	1/10W
R032	1-216-025-91	RES-CHIP	100	5%	1/10W
R034	1-216-049-91	RES-CHIP	1K	5%	1/10W
R035	1-216-025-91	RES-CHIP	100	5%	1/10W
R036	1-216-025-91	RES-CHIP	100	5%	1/10W
R037	1-216-083-00	RES-CHIP	27K	5%	1/10W
R038	1-216-049-91	RES-CHIP	1K	5%	1/10W
R040	1-216-025-91	RES-CHIP	100	5%	1/10W
R041	1-216-025-91	RES-CHIP	100	5%	1/10W
R042	1-216-295-91	SHORT	0		
R043	1-216-049-91	RES-CHIP	1K	5%	1/10W
R044	1-216-025-91	RES-CHIP	100	5%	1/10W
R045	1-414-233-22	INDUCTOR CHIP	0UH		
R046	1-216-049-91	RES-CHIP	1K	5%	1/10W
R047	1-414-233-22	INDUCTOR CHIP	0UH		
R048	1-216-073-00	RES-CHIP	10K	5%	1/10W
R049	1-216-073-00	RES-CHIP	10K	5%	1/10W
R050	1-216-073-00	RES-CHIP	10K	5%	1/10W
R052	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R053	1-216-049-91	RES-CHIP	1K	5%	1/10W
R055	1-216-073-00	RES-CHIP	10K	5%	1/10W
R056	1-216-073-00	RES-CHIP	10K	5%	1/10W
R061	1-216-295-91	SHORT	0		
R062	1-216-041-00	RES-CHIP	470	5%	1/10W
R063	1-216-041-00	RES-CHIP	470	5%	1/10W
R064	1-216-041-00	RES-CHIP	470	5%	1/10W
R065	1-216-041-00	RES-CHIP	470	5%	1/10W
R066	1-216-049-91	RES-CHIP	1K	5%	1/10W
R067	1-216-049-91	RES-CHIP	1K	5%	1/10W
R103	1-216-025-91	RES-CHIP	100	5%	1/10W
R104	1-216-025-91	RES-CHIP	100	5%	1/10W
R105	1-216-295-91	SHORT	0		
R106	1-216-049-91	RES-CHIP	1K	5%	1/10W
R109	1-216-041-00	RES-CHIP	470	5%	1/10W
R111	1-216-025-91	RES-CHIP	100	5%	1/10W
R112	1-216-025-91	RES-CHIP	100	5%	1/10W
R113	1-216-025-91	RES-CHIP	100	5%	1/10W
R114	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R115	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R225	1-216-033-00	RES-CHIP	220	5%	1/10W
R226	1-216-033-00	RES-CHIP	220	5%	1/10W
R227	1-216-033-00	RES-CHIP	220	5%	1/10W
R237	1-216-295-91	SHORT	0		
R301	1-216-113-00	RES-CHIP	470K	5%	1/10W
R302	1-216-295-91	SHORT	0		
R303	1-216-049-91	RES-CHIP	1K	5%	1/10W
R304	1-216-073-00	RES-CHIP	10K	5%	1/10W
R306	1-216-085-00	RES-CHIP	33K	5%	1/10W
R308	1-216-025-91	RES-CHIP	100	5%	1/10W
R309	1-216-025-91	RES-CHIP	100	5%	1/10W
R310	1-216-025-91	RES-CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R316	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R318	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R319	1-216-025-91	RES-CHIP	100	5%	1/10W
R320	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R321	1-216-073-00	RES-CHIP	10K	5%	1/10W
R322	1-216-033-00	RES-CHIP	220	5%	1/10W
R326	1-216-029-00	RES-CHIP	150	5%	1/10W
R327	1-216-033-00	RES-CHIP	220	5%	1/10W
R328	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R329	1-216-041-00	RES-CHIP	470	5%	1/10W
R331	1-216-295-91	SHORT	0		
R332	1-216-033-00	RES-CHIP	220	5%	1/10W
R333	1-216-083-00	RES-CHIP	27K	5%	1/10W
R334	1-216-129-00	RES-CHIP	2.2M	5%	1/10W
R335	1-216-045-00	RES-CHIP	680	5%	1/10W
R338	1-216-037-00	RES-CHIP	330	5%	1/10W
R339	1-216-033-00	RES-CHIP	220	5%	1/10W
R340	1-216-025-91	RES-CHIP	100	5%	1/10W
R345	1-216-081-00	RES-CHIP	22K	5%	1/10W
R348	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R349	1-216-073-00	RES-CHIP	10K	5%	1/10W
R350	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R351	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R354	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R355	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R356	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R357	1-216-079-00	RES-CHIP	18K	5%	1/10W
R358	1-216-049-91	RES-CHIP	1K	5%	1/10W
R359	1-216-033-00	RES-CHIP	220	5%	1/10W
R360	1-216-033-00	RES-CHIP	220	5%	1/10W
R361	1-216-073-00	RES-CHIP	10K	5%	1/10W
R362	1-216-075-00	RES-CHIP	12K	5%	1/10W
R363	1-216-079-00	RES-CHIP	18K	5%	1/10W
R364	1-216-295-91	SHORT	0		
R365	1-216-033-00	RES-CHIP	220	5%	1/10W
R366	1-216-073-00	RES-CHIP	10K	5%	1/10W
R367	1-216-073-00	RES-CHIP	10K	5%	1/10W
R368	1-216-073-00	RES-CHIP	10K	5%	1/10W
R370	1-216-033-00	RES-CHIP	220	5%	1/10W
R376	1-216-081-00	RES-CHIP	22K	5%	1/10W
R377	1-216-121-91	RES-CHIP	1M	5%	1/10W
R378	1-216-295-91	SHORT	0		
R500	1-249-417-11	CARBON	1K	5%	1/4W
R501	1-216-049-91	RES-CHIP	1K	5%	1/10W
R505	1-216-699-91	METAL CHIP	100K	0.5%	1/10W
R506	1-216-081-00	RES-CHIP	22K	5%	1/10W
R507	1-249-389-11	CARBON	4.7	5%	1/4W
R508	1-216-471-11	METAL OXIDE	27	5%	3W
R509	1-216-473-11	METAL OXIDE	56	5%	3W
R510	1-216-473-11	METAL OXIDE	56	5%	3W
R511	1-215-908-00	METAL OXIDE	33	5%	3W
R515	1-215-911-11	METAL OXIDE	100	5%	3W
R517	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-215-913-11	METAL OXIDE	220	5%	3W
R520	1-215-445-00	METAL	10K	1%	1/4W
R522	1-208-806-11	METAL CHIP	10K	0.5%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R523	1-249-411-11	CARBON	330	5%	1/4W
R525	1-208-846-11	METAL CHIP	470K	0.5%	1/10W
R526	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R527	1-216-001-00	RES-CHIP	10	5%	1/10W
R528	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R529	1-208-766-11	METAL CHIP	220	0.5%	1/10W
R531	1-247-843-11	CARBON	3.3K	5%	1/4W
R533	1-249-417-11	CARBON	1K	5%	1/4W
R534	1-216-364-11	METAL OXIDE	0.39	5%	2W
R535	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R536	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R537	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R539	1-216-049-91	RES-CHIP	1K	5%	1/10W
R540	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R541	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R542	1-216-073-00	RES-CHIP	10K	5%	1/10W
R543	1-216-437-00	METAL OXIDE	5.6K	5%	1W
R544	1-215-917-11	METAL OXIDE	1K	5%	3W
R545	1-216-077-91	RES-CHIP	15K	5%	1/10W
R546	1-216-077-91	RES-CHIP	15K	5%	1/10W
R547	1-216-085-00	RES-CHIP	33K	5%	1/10W
R548	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R549	1-215-452-00	METAL	20K	1%	1/4W
R550	1-216-097-91	RES-CHIP	100K	5%	1/10W
R551	1-249-441-11	CARBON	100K	5%	1/4W
R552	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R553	1-215-453-00	METAL	22K	1%	1/4W
R554	1-215-453-00	METAL	22K	1%	1/4W
R556	1-215-437-00	METAL	4.7K	1%	1/4W
R558	1-247-843-11	CARBON	3.3K	5%	1/4W
R559	1-249-429-11	CARBON	10K	5%	1/4W
R560	1-216-073-00	RES-CHIP	10K	5%	1/10W
R561	1-216-049-91	RES-CHIP	1K	5%	1/10W
R562	1-249-401-11	CARBON	47	5%	1/4W
R564	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R565	1-216-073-00	RES-CHIP	10K	5%	1/10W
R567	1-216-105-91	RES-CHIP	220K	5%	1/10W
R568	1-249-383-11	CARBON	1.5	5%	1/4W
R570	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R571	1-215-443-00	METAL	8.2K	1%	1/4W
R573	1-216-083-00	RES-CHIP	27K	5%	1/10W
R575	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R577	1-215-913-11	METAL OXIDE	220	5%	3W
R578	1-216-369-00	METAL OXIDE	1	5%	2W
R579	1-216-295-91	SHORT	0		
R580	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R581	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R582	1-208-846-11	METAL CHIP	470K	0.5%	1/10W
R584	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R587	1-216-295-91	SHORT	0		
R588	1-215-888-00	METAL OXIDE	220	5%	2W
R589	1-215-888-00	METAL OXIDE	220	5%	2W
R590	1-215-465-00	METAL	68K	1%	1/4W
R591	1-260-288-11	CARBON	0.47	5%	1/2W
R592	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R593	1-260-288-11	CARBON	0.47	5%	1/2W
R594	1-260-288-11	CARBON	0.47	5%	1/2W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R595	1-216-073-00	RES-CHIP	10K	5%	1/10W
R596	1-215-916-00	METAL OXIDE	680	5%	3W
R597	1-247-750-11	CARBON	680	5%	1/2W
R598	1-249-438-11	CARBON	56K	5%	1/4W
R599	1-249-389-11	CARBON	4.7	5%	1/4W
R600	1-249-438-11	CARBON	56K	5%	1/4W
R601	1-249-420-11	CARBON	1.8K	5%	1/4W
R602	1-249-389-11	CARBON	4.7	5%	1/4W
R603	1-215-485-00	METAL	470K	1%	1/4W
R604	1-216-097-91	RES-CHIP	100K	5%	1/10W
R607	1-249-425-11	CARBON	4.7K	5%	1/4W
R608	1-240-205-91	CARBON	22M	5%	1/2W
R609	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R610	1-216-073-00	RES-CHIP	10K	5%	1/10W
R611	1-216-089-91	RES-CHIP	47K	5%	1/10W
R612	1-216-045-00	RES-CHIP	680	5%	1/10W
R614	1-216-041-00	RES-CHIP	470	5%	1/10W
R615	1-216-369-00	METAL OXIDE	1	5%	2W
R616	1-260-302-51	CARBON	6.8	5%	1/2W
R617	1-247-791-91	CARBON	22	5%	1/4W
R619	1-260-128-11	CARBON	270K	5%	1/2W
R621	1-215-864-00	METAL OXIDE	150	5%	1W
R623	1-216-095-00	RES-CHIP	82K	5%	1/10W
R624	1-216-089-91	RES-CHIP	47K	5%	1/10W
R626	1-216-049-91	RES-CHIP	1K	5%	1/10W
R627	1-240-251-11	CEMENTED	6.8	5%	10W
R629	1-247-747-11	CARBON	470	5%	1/2W
R630	1-249-429-11	CARBON	10K	5%	1/4W
R631	1-216-089-91	RES-CHIP	47K	5%	1/10W
R632	1-220-886-11	FUSIBLE	0.1	10%	1W
R634	⚠ 1-218-265-11	METAL	8.2M	5%	1W
R636	1-215-924-00	METAL OXIDE	15K	5%	3W
R639	1-216-361-21	METAL OXIDE	0.22	5%	2W
R640	1-249-415-11	CARBON	680	5%	1/4W
R641	1-216-361-21	METAL OXIDE	0.22	5%	2W
R642	1-249-419-11	CARBON	1.5K	5%	1/4W
R643	1-247-843-11	CARBON	3.3K	5%	1/4W
R644	1-249-419-11	CARBON	1.5K	5%	1/4W
R646	1-215-924-00	METAL OXIDE	15K	5%	3W
R647	1-249-387-11	CARBON	3.3	5%	1/4W
R648	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R649	1-249-417-11	CARBON	1K	5%	1/4W
R650	1-215-882-00	METAL OXIDE	22	5%	2W
R652	1-215-900-11	METAL OXIDE	22K	5%	2W
R653	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R654	1-216-369-00	METAL OXIDE (KV-XS29N93)	1	5%	2W
R656	1-249-417-11	CARBON	1K	5%	1/4W
R657	1-260-127-11	CARBON	220K	5%	1/2W
R659	1-216-049-91	RES-CHIP	1K	5%	1/10W
R660	1-216-073-00	RES-CHIP	10K	5%	1/10W
R661	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R682	1-249-377-11	CARBON	0.47	5%	1/4W
R909	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R910	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A **B3**

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RELAY>			
RY600	⚠ 1-755-214-11	RELAY, AC POWER			
RY601	⚠ 1-755-214-11	RELAY, AC POWER			
		<SWITCH>			
S501	1-572-707-11	SWITCH, LEVER			
S502	1-572-707-11	SWITCH, LEVER			
		<TRANSFORMER>			
T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE			
T503	⚠ 1-453-284-11	TRANSFORMER ASSY, FLYBACK (NX-4009//M314)			
T504	1-431-693-11	TRANSFORMER, HORIZONTAL LINEAR			
T505	1-426-981-11	TRANSFORMER, FERRITE (PMT)			
T601	1-424-505-11	TRANSFORMER, LINE FILTER			
T603	⚠ 1-431-976-11	TRANSFORMER, CONVERTER (SRT)			
T604	⚠ 1-431-852-11	TRANSFORMER, CONVERTER (SRT)			
		<THERMISTOR>			
THP600	1-803-629-11	THERMISTOR, POSITIVE			
		<TUNER>			
TU101	8-598-477-20	TUNER, FSS BTF-WG411			
		<CRYSTAL>			
X001	1-781-174-21	VIBRATOR, CERAMIC			
X301	1-781-134-21	VIBRATOR, CRYSTAL			
X302	1-781-132-21	VIBRATOR, CRYSTAL			
**********					
	* A-1136-055-A	B3 BOARD COMPLETE (KV-XS29N90)			
	* A-1136-101-A	B3 BOARD COMPLETE (KV-XS29N93)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C1401	1-104-661-91	ELECT (KV-XS29N93)	330UF	20.00% 16V	
C1402	1-104-664-11	ELECT	47UF	20.00% 25V	
C1403	1-104-664-11	ELECT (KV-XS29N93)	47UF	20.00% 25V	
C1404	1-164-004-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00% 25V	
C1404	1-216-295-91	SHORT	0 (KV-XS29N90)		
C1405	1-104-664-11	ELECT	47UF	20.00% 25V	
C1408	1-126-964-11	ELECT (KV-XS29N93)	10UF	20.00% 50V	
C1410	1-104-664-11	ELECT	47UF	20.00% 25V	

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1411	1-216-295-91	SHORT	0 (KV0XS29N90)		
C1411	1-164-004-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00% 25V	
C1413	1-126-935-11	ELECT	470UF	20.00% 16V	
C1414	1-164-346-11	CERAMIC CHIP	1UF	16V	
C1415	1-104-664-11	ELECT	47UF	20.00% 25V	
C1416	1-164-346-11	CERAMIC CHIP	1UF	16V	
C1418	1-163-031-11	CERAMIC CHIP	0.01UF	50V	
C1419	1-163-251-11	CERAMIC CHIP (KV-XS29N93)	100PF	5.00% 50V	
C1421	1-164-346-11	CERAMIC CHIP (KV-XS29N93)	1UF	16V	
C1422	1-164-346-11	CERAMIC CHIP	1UF	16V	
C1423	1-164-346-11	CERAMIC CHIP	1UF	16V	
C1425	1-164-346-11	CERAMIC CHIP	1UF	16V	
C1426	1-164-346-11	CERAMIC CHIP	1UF	16V	
C1428	1-104-665-11	ELECT	100UF	20.00% 25V	
C1429	1-104-663-11	ELECT	33UF	20.00% 25V	
C1431	1-163-038-91	CERAMIC CHIP	0.1UF	25V	
C1432	1-126-933-11	ELECT (KV-XS29N93)	100UF	20.00% 16V	
C1433	1-104-664-11	ELECT	47UF	20.00% 16V	
C1434	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1435	1-163-038-91	CERAMIC CHIP	0.1UF	25V	
C1436	1-163-038-91	CERAMIC CHIP	0.1UF	25V	
C1439	1-163-133-00	CERAMIC CHIP (KV-XS29N93)	470PF	5.00% 50V	
C1440	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1441	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1442	1-163-133-00	CERAMIC CHIP (KV-XS29N93)	470PF	5.00% 50V	
C1443	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1444	1-164-005-11	CERAMIC CHIP	0.47UF	25V	
C1445	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1446	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1447	1-126-964-11	ELECT	10UF	20.00% 50V	
C1448	1-164-005-11	CERAMIC CHIP	0.47UF	25V	
C1449	1-126-933-11	ELECT	100UF	20.00% 16V	
C1457	1-164-346-11	CERAMIC CHIP (KV-XS29N93)	1UF	16V	
C1459	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1460	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V	
C1461	1-164-346-11	CERAMIC CHIP	1UF	16V	
C1462	1-164-346-11	CERAMIC CHIP	1UF	16V	
C3201	1-126-964-11	ELECT	10UF	20.00% 50V	
C3202	1-136-171-00	MYLAR (KV-XS29N90)	0.33UF	5.00% 50V	
C3203	1-115-339-11	CERAMIC CHIP	0.1UF	10.00% 50V	
C3206	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V	
C3207	1-164-489-11	CERAMIC CHIP	0.22UF	10.00% 16V	
C3208	1-164-489-11	CERAMIC CHIP	0.22UF	10.00% 16V	
C3209	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V	
C3210	1-126-964-11	ELECT	10UF	20.00% 50V	
C3211	1-126-964-11	ELECT	10UF	20.00% 50V	
C3212	1-126-964-11	ELECT	10UF	20.00% 50V	
C3213	1-104-664-11	ELECT	47UF	20.00% 25V	
C3214	1-104-664-11	ELECT	47UF	20.00% 25V	
C3215	1-117-720-11	CERAMIC CHIP	4.7UF	10V	

B3

REF. NO.	PART NO.	DESCRIPTION			REMARK
C3216	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C3217	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C3218	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C3219	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00%	50V
C3220	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3221	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3222	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3223	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C3224	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C3225	1-163-038-91	CERAMIC CHIP	0.1UF		25V
C3226	1-126-964-11	ELECT	10UF	20.00%	50V
C3227	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C3228	1-107-698-11	ELECT	10UF	20.00%	25V
C3229	1-107-698-11	ELECT	10UF	20.00%	25V
C3238	1-164-005-11	CERAMIC CHIP (KV-XS29N90)	0.47UF		25V
C3239	1-136-171-00	MYLAR (KV-XS29N90)	0.33UF	5.00%	50V
C3240	1-115-339-11	CERAMIC CHIP	0.1UF	10.00%	50V
C3243	1-163-989-11	CERAMIC CHIP (KV-XS29N90)	0.033UF	10.00%	25V
C3244	1-164-346-11	CERAMIC CHIP (KV-XS29N90)	1UF		16V
C3245	1-164-005-11	CERAMIC CHIP (KV-XS29N90)	0.47UF		25V
C3246	1-163-243-11	CERAMIC CHIP (KV-XS29N90)	47PF	5.00%	50V
C3247	1-126-963-11	ELECT (KV-XS29N90)	4.7UF	20.00%	50V
C3248	1-163-251-11	CERAMIC CHIP (KV-XS29N90)	100PF	5.00%	50V
C3249	1-164-505-11	CERAMIC CHIP (KV-XS29N90)	2.2UF		16V
C3249	1-216-295-91	SHORT	0 (KV-XS29N93)		
C3250	1-164-346-11	CERAMIC CHIP (KV-XS29N90)	1UF		16V
C3251	1-126-964-11	ELECT (KV-XS29N90)	10UF	20.00%	50V
C3252	1-163-251-11	CERAMIC CHIP (KV-XS29N90)	100PF	5.00%	50V
C3253	1-126-933-11	ELECT (KV-XS29N90)	100UF	20.00%	16V
C3254	1-164-505-11	CERAMIC CHIP (KV-XS29N90)	2.2UF		16V
C3254	1-216-295-91	SHORT	0 (KV-XS29N93)		
C3255	1-163-243-11	CERAMIC CHIP (KV-XS29N90)	47PF	5.00%	50V
C3256	1-126-963-11	ELECT (KV-XS29N90)	4.7UF	20.00%	50V
C3257	1-164-346-11	CERAMIC CHIP (KV-XS29N90)	1UF		16V
C3258	1-163-989-11	CERAMIC CHIP (KV-XS29N90)	0.033UF	10.00%	25V
C3259	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3260	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C3262	1-104-664-11	ELECT	47UF	20.00%	16V
C3264	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C3265	1-126-964-11	ELECT	10UF	20.00%	50V
C3266	1-126-964-11	ELECT	10UF	20.00%	50V
C3268	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C3269	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C3270	1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C3271	1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
C3272	1-126-965-11	ELECT	22UF	20.00%	50V
C3273	1-115-339-11	CERAMIC CHIP	0.1UF	10.00%	50V
C3274	1-126-964-11	ELECT	10UF	20.00%	50V
C3276	1-164-492-11	CERAMIC CHIP (KV-XS29N90)	0.15UF	10.00%	16V
C3276	1-107-823-11	CERAMIC CHIP (KV-XS29N93)	0.47UF	10.00%	16V
C3277	1-164-492-11	CERAMIC CHIP (KV-XS29N90)	0.15UF	10.00%	16V
C3277	1-164-004-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	25V
C3278	1-164-492-11	CERAMIC CHIP (KV-XS29N90)	0.15UF	10.00%	16V
C3278	1-107-823-11	CERAMIC CHIP (KV-XS29N93)	0.47UF	10.00%	16V
C3279	1-164-492-11	CERAMIC CHIP (KV-XS29N90)	0.15UF	10.00%	16V
C3279	1-164-004-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	25V
C3280	1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C3281	1-163-023-00	CERAMIC CHIP	0.015UF	10.00%	50V
C3282	1-126-964-11	ELECT	10UF	20.00%	50V
C3283	1-126-964-11	ELECT	10UF	20.00%	50V
C3284	1-115-339-11	CERAMIC CHIP	0.1UF	10.00%	50V
C3285	1-126-964-11	ELECT	10UF	20.00%	50V
C3286	1-126-964-11	ELECT	10UF	20.00%	50V
C3287	1-126-964-11	ELECT	10UF	20.00%	50V
C3288	1-163-023-00	CERAMIC CHIP	0.015UF	10.00%	50V
C3289	1-163-018-00	CERAMIC CHIP	0.0056UF	10.00%	50V
C3290	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C3291	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C6200	1-216-295-91	SHORT	0		
C6201	1-126-964-11	ELECT (KV-XS29N93)	10UF	20.00%	50V
C6202	1-128-550-11	ELECT	2200UF	20.00%	50V
C6203	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C6204	1-128-550-11	ELECT	2200UF	20.00%	50V
C6205	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6206	1-128-550-11	ELECT	2200UF	20.00%	50V
C6207	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6208	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6209	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6210	1-126-924-11	ELECT	330UF	20.00%	10V
C6211	1-126-924-11	ELECT	330UF	20.00%	10V
C6212	1-104-664-11	ELECT	47UF	20.00%	25V
C6213	1-126-964-11	ELECT	10UF	20.00%	50V
C6215	1-126-933-11	ELECT (KV-XS29N93)	100UF	20.00%	16V
C6216	1-126-960-11	ELECT (KV-XS29N93)	1UF	20.00%	50V
C6217	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C6218	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6219	1-126-961-11	ELECT (KV-XS29N93)	2.2UF	20.00%	50V

B3

REF. NO.	PART NO.	DESCRIPTION			REMARK
C6220	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C6221	1-126-960-11	ELECT (KV-XS29N93)	1UF	20.00%	50V
C6222	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C6223	1-126-960-11	ELECT	1UF	20.00%	50V
C6225	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6226	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6227	1-128-550-11	ELECT (KV-XS29N93)	2200UF	20.00%	50V
C6228	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6229	1-164-505-11	CERAMIC CHIP (KV-XS29N93)	2.2UF		16V
C6230	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6231	1-128-550-11	ELECT (KV-XS29N93)	2200UF	20.00%	50V
C6232	1-163-275-11	CERAMIC CHIP (KV-XS29N93)	0.001UF	5.00%	50V
C6233	1-163-007-11	CERAMIC CHIP (KV-XS29N93)	680PF	10.00%	50V
C6234	1-163-017-00	CERAMIC CHIP (KV-XS29N93)	0.0047UF	10.00%	50V
C6235	1-163-251-11	CERAMIC CHIP (KV-XS29N93)	100PF	5.00%	50V
C6236	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	10.00%	50V
C6237	1-136-177-00	MYLAR (KV-XS29N93)	1UF	5.00%	50V
C6238	1-163-009-11	CERAMIC CHIP (KV-XS29N93)	0.001UF	10.00%	50V
C6239	1-127-682-51	ELECT MELF (KV-XS29N93)	2200UF	20%	25V
C6240	1-130-495-00	MYLAR (KV-XS29N93)	0.1UF	5.00%	50V
C6241	1-126-964-11	ELECT	10UF	20.00%	50V
C6244	1-164-161-11	CERAMIC CHIP (KV-XS29N90)	0.0022UF	10.00%	50V
C6244	1-164-182-11	CERAMIC CHIP (KV-XS29N93)	0.0033UF	10.00%	50V
C6245	1-164-161-11	CERAMIC CHIP (KV-XS29N90)	0.0022UF	10.00%	50V
C6245	1-164-182-11	CERAMIC CHIP (KV-XS29N93)	0.0033UF	10.00%	50V
C6249	1-216-295-91	SHORT	0		
C6251	1-126-965-11	ELECT (KV-XS29N93)	22UF	20.00%	50V
C6252	1-126-965-11	ELECT (KV-XS29N93)	22UF	20.00%	50V
C6253	1-126-960-11	ELECT (KV-XS29N93)	1UF	20.00%	50V
		<CONNECTOR>			
CN1400*	1-564-512-11	PLUG, CONNECTOR 9P			
CN1402*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N90)			
CN1403*	1-564-506-11	PLUG, CONNECTOR 3P			
CN1405*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
CN1406*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
CN1407*	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
CN1408	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P			
CN1409	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P			
CN1410	1-695-915-11	TAB (CONTACT)			
CN6200*	1-564-507-11	PLUG, CONNECTOR 4P			
CN6202*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)			
CN6204*	1-564-509-11	PLUG, CONNECTOR 6P			
CN6205*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)			
CN6206*	1-564-508-11	PLUG, CONNECTOR 5P			
		<DIODE>			
D1401	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1402	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1403	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1404	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1405	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1406	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1407	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1408	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1409	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1410	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1411	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1412	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1415	8-719-069-60	DIODE UDZS-TE17-9.1B			
D1416	8-719-069-60	DIODE UDZS-TE17-9.1B			
D3201	8-719-988-61	DIODE 1SS355TE-17 (KV-XS29N90)			
D3203	8-719-988-61	DIODE 1SS355TE-17 (KV-XS29N90)			
D6200	8-719-109-86	DIODE RD5.1ES-T1B3 (KV-XS29N93)			
D6205	8-719-988-61	DIODE 1SS355TE-17 (KV-XS29N93)			
D6211	8-719-073-01	DIODE MA111-TX			
D6212	8-719-073-01	DIODE MA111-TX			
		<FERRITE BEAD>			
FB6201	1-410-397-21	FERRITE	1.1UH (KV-XS29N93)		
FB6202	1-410-397-21	FERRITE	1.1UH (KV-XS29N93)		
		<IC>			
IC1401	8-752-068-46	IC CXA1855S			
IC1402	8-759-100-96	IC NJM4558M-TE2 (KV-XS29N93)			
IC1404	8-759-701-59	IC L7809CV			
IC3200	8-759-100-96	IC NJM4558M-T2			
IC3201	8-759-553-44	IC NJM2187L			
IC3202	8-759-100-96	IC NJM4558M-T2			
IC3203	8-759-711-10	IC NJU4066BM-T2			
IC3204	8-759-100-96	IC NJM4558M-TE2 (KV-XS29N90)			
IC3205	8-752-057-18	IC CXA1315P			
IC3206	8-759-496-02	IC NJM2150D			
IC3207	8-759-273-12	IC TDA7315D013TR			
IC6200	8-759-168-24	IC TA8200AH			
IC6201	8-759-553-45	IC TDA7481 (KV-XS29N93)			
		<JACK>			
J1401	1-784-646-11	TERMINAL, S			
J1402	1-778-388-11	JACK BLOCK, PIN 9P (KV-XS29N90)			
J1402	1-778-387-11	JACK BLOCK, PIN 12P (KV-XS29N93)			

B3

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<CHIP CONDUCTOR>			
JR1405	1-216-295-91	SHORT	0		
JR1406	1-216-295-91	SHORT	0		
JR1407	1-216-295-91	SHORT	0		
JR1408	1-216-295-91	SHORT	0 (KV-XS29N90)		
JR1409	1-216-295-91	SHORT	0 (KV-XS29N93)		
JR1410	1-216-295-91	SHORT	0 (KV-XS29N93)		
JR1411	1-216-295-91	SHORT	0		
JR3200	1-216-295-91	SHORT	0		
JR3201	1-216-295-91	SHORT	0		
JR3202	1-216-295-91	SHORT	0		
JR3203	1-216-295-91	SHORT	0		
JR3204	1-216-295-91	SHORT	0		
JR3207	1-216-295-91	SHORT	0		
JR3208	1-216-295-91	SHORT	0		
JR3209	1-216-295-91	SHORT	0		
JR6200	1-216-295-91	SHORT	0		
JR6201	1-216-295-91	SHORT	0 (KV-XS29N93)		
JR6202	1-216-295-91	SHORT	0		
JR6203	1-216-295-91	SHORT	0		
JR6204	1-216-295-91	SHORT	0		
		<COIL>			
L1404	1-412-537-31	INDUCTOR	100UH		
L3202	1-414-856-11	INDUCTOR	10UH		
L6202	1-416-857-11	INDUCTOR	65UH (KV-XS29N93)		
		<IC LINK>			
PS6200	1-532-686-21	LINK, IC 2.7A/150V (KV-XS29N93)			
PS6201	1-532-686-21	LINK, IC 2.7A/150V (KV-XS29N93)			
		<TRANSISTOR>			
Q1402	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L			
Q1403	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1404	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1408	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)			
Q1409	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)			
Q3201	8-729-224-62	TRANSISTOR 2SK246GR-TPE2			
Q3202	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N90)			
Q3203	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N90)			
Q3204	8-729-224-62	TRANSISTOR 2SK246GR-TPE2			
Q6200	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)			
Q6201	8-729-421-19	TRANSISTOR UN2213-TX			
Q6203	8-729-421-19	TRANSISTOR UN2213-TX			
Q6204	8-729-421-19	TRANSISTOR UN2213-TX			
Q6208	8-729-421-19	TRANSISTOR UN2213-TX			
		<RESISTOR>			
R1400	1-216-105-91	RES-CHIP (KV-XS29N93)	220K	5%	1/10W
R1403	1-216-033-00	RES-CHIP	220	5%	1/10W
R1404	1-216-295-91	SHORT	0		
R1406	1-216-013-00	RES-CHIP	33	5%	1/10W
R1407	1-216-033-00	RES-CHIP	220	5%	1/10W
R1408	1-216-031-00	RES-CHIP	180	5%	1/10W
R1409	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1410	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1411	1-216-295-91	SHORT	0 (KV-XS29N90)		
R1411	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R1412	1-216-295-91	SHORT	0 (KV-XS29N90)		
R1412	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R1413	1-216-105-91	RES-CHIP (KV-XS29N93)	220K	5%	1/10W
R1414	1-216-025-91	RES-CHIP	100	5%	1/10W
R1417	1-216-025-91	RES-CHIP	100	5%	1/10W
R1418	1-216-025-91	RES-CHIP	100	5%	1/10W
R1421	1-216-057-00	RES-CHIP (KV-XS29N93)	2.2K	5%	1/10W
R1424	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W
R1425	1-216-047-91	RES-CHIP (KV-XS29N93)	820	5%	1/10W
R1426	1-216-025-91	RES-CHIP	100	5%	1/10W
R1427	1-216-063-91	RES-CHIP (KV-XS29N93)	3.9K	5%	1/10W
R1428	1-216-025-91	RES-CHIP	100	5%	1/10W
R1429	1-216-295-91	SHORT	0 (KV-XS29N90)		
R1429	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R1430	1-216-025-91	RES-CHIP	100	5%	1/10W
R1431	1-216-025-91	RES-CHIP	100	5%	1/10W
R1432	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1433	1-216-025-91	RES-CHIP	100	5%	1/10W
R1435	1-216-022-00	RES-CHIP	75	5%	1/10W
R1436	1-216-025-91	RES-CHIP	100	5%	1/10W
R1437	1-216-022-00	RES-CHIP	75	5%	1/10W
R1438	1-216-025-91	RES-CHIP	100	5%	1/10W
R1439	1-216-295-91	SHORT	0 (KV-XS29N93)		
R1441	1-216-025-91	RES-CHIP	100	5%	1/10W
R1442	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1443	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1444	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R1445	1-216-025-91	RES-CHIP	100	5%	1/10W
R1446	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1447	1-216-025-91	RES-CHIP	100	5%	1/10W
R1448	1-216-043-91	RES-CHIP (KV-XS29N93)	560	5%	1/10W
R1449	1-249-429-11	CARBON	10K	5%	1/4W
R1450	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1451	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1452	1-216-295-91	SHORT	0 (KV-XS29N90)		
R1452	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R1453	1-216-025-91	RES-CHIP	100	5%	1/10W
R1454	1-216-091-00	RES-CHIP (KV-XS29N93)	56K	5%	1/10W
R1455	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1456	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1457	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1458	1-216-073-00	RES-CHIP	10K	5%	1/10W

B3

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1459	1-216-025-91	RES-CHIP	100	5%	1/10W
R1460	1-216-033-00	RES-CHIP	220	5%	1/10W
R1461	1-216-025-91	RES-CHIP	100	5%	1/10W
R1463	1-249-429-11	CARBON	10K	5%	1/4W
R1464	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1465	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1466	1-216-033-00	RES-CHIP	220	5%	1/10W
R1467	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1468	1-216-093-91	RES-CHIP	68K	5%	1/10W
R1469	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1470	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1471	1-216-022-00	RES-CHIP	75	5%	1/10W
R1472	1-216-033-00	RES-CHIP	220	5%	1/10W
R1473	1-216-033-00	RES-CHIP	220	5%	1/10W
R1475	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R1476	1-216-091-00	RES-CHIP (KV-XS29N93)	56K	5%	1/10W
R1477	1-216-047-91	RES-CHIP	820	5%	1/10W
R1478	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R1479	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1480	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1481	1-216-022-00	RES-CHIP	75	5%	1/10W
R1482	1-216-025-91	RES-CHIP	100	5%	1/10W
R1483	1-216-025-91	RES-CHIP	100	5%	1/10W
R1484	1-216-025-91	RES-CHIP	100	5%	1/10W
R1485	1-216-025-91	RES-CHIP	100	5%	1/10W
R1486	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1487	1-216-057-00	RES-CHIP (KV-XS29N93)	2.2K	5%	1/10W
R1488	1-216-057-00	RES-CHIP (KV-XS29N93)	2.2K	5%	1/10W
R1489	1-216-022-00	RES-CHIP (KV-XS29N93)	75	5%	1/10W
R1490	1-216-025-91	RES-CHIP	100	5%	1/10W
R1491	1-216-025-91	RES-CHIP	100	5%	1/10W
R1492	1-216-021-00	RES-CHIP	68	5%	1/10W
R1493	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1496	1-216-041-00	RES-CHIP	470	5%	1/10W
R1497	1-216-041-00	RES-CHIP	470	5%	1/10W
R1498	1-216-025-91	RES-CHIP	100	5%	1/10W
R1499	1-216-025-91	RES-CHIP	100	5%	1/10W
R1500	1-216-025-91	RES-CHIP	100	5%	1/10W
R1501	1-216-045-00	RES-CHIP (KV-XS29N93)	680	5%	1/10W
R1502	1-216-025-91	RES-CHIP	100	5%	1/10W
R1503	1-216-025-91	RES-CHIP (KV-XS29N90)	100	5%	1/10W
R1503	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W
R1504	1-216-025-91	RES-CHIP (KV-XS29N90)	100	5%	1/10W
R1504	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W
R3200	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W
R3201	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W
R3202	1-216-097-91	RES-CHIP (KV-XS29N90)	100K	5%	1/10W \
R3203	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W
R3204	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K	5%	1/10W
R3205	1-216-069-00	RES-CHIP (KV-XS29N90)	6.8K	5%	1/10W
R3206	1-216-039-00	RES-CHIP (KV-XS29N90)	390	5%	1/10W
R3207	1-216-073-00	RES-CHIP (KV-XS29N90)	10K	5%	1/10W
R3208	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R3209	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3210	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R3211	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3212	1-216-049-91	RES-CHIP	1K	5%	1/10W
R3213	1-216-091-00	RES-CHIP	56K	5%	1/10W
R3214	1-216-295-91	SHORT	0		
R3215	1-216-295-91	SHORT	0		
R3216	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3217	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3218	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R3219	1-216-077-91	RES-CHIP	15K	5%	1/10W
R3220	1-216-097-91	RES-CHIP (KV-XS29N90)	100K	5%	1/10W
R3221	1-216-073-00	RES-CHIP (KV-XS29N90)	10K	5%	1/10W
R3222	1-216-073-00	RES-CHIP (KV-XS29N90)	10K	5%	1/10W
R3223	1-216-045-00	RES-CHIP (KV-XS29N90)	680	5%	1/10W
R3224	1-216-115-00	RES-CHIP (KV-XS29N90)	560K	5%	1/10W
R3224	1-216-101-00	RES-CHIP (KV-XS29N93)	150K	5%	1/10W
R3225	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3226	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3227	1-216-129-00	RES-CHIP	2.2M	5%	1/10W
R3228	1-216-085-00	RES-CHIP	33K	5%	1/10W
R3229	1-216-095-00	RES-CHIP	82K	5%	1/10W
R3230	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R3231	1-216-091-00	RES-CHIP	56K	5%	1/10W
R3232	1-216-089-91	RES-CHIP	47K	5%	1/10W
R3233	1-216-069-00	RES-CHIP (KV-XS29N90)	6.8K	5%	1/10W
R3234	1-216-039-00	RES-CHIP (KV-XS29N90)	390	5%	1/10W
R3235	1-216-101-00	RES-CHIP (KV-XS29N90)	150K	5%	1/10W
R3236	1-216-113-00	RES-CHIP (KV-XS29N90)	470K	5%	1/10W
R3237	1-216-045-00	RES-CHIP (KV-XS29N90)	680	5%	1/10W
R3238	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3239	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3240	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3241	1-216-093-91	RES-CHIP	68K	5%	1/10W
R3242	1-216-081-00	RES-CHIP	22K	5%	1/10W

B3

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3243	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3244	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3245	1-216-097-91	RES-CHIP (KV-XS29N90)	100K	5%	1/10W
R3246	1-216-045-00	RES-CHIP (KV-XS29N90)	680	5%	1/10W
R3247	1-216-101-00	RES-CHIP	150K	5%	1/10W
R3248	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3249	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3250	1-216-049-91	RES-CHIP	1K	5%	1/10W
R3251	1-216-101-00	RES-CHIP (KV-XS29N90)	150K	5%	1/10W
R3252	1-216-113-00	RES-CHIP (KV-XS29N90)	470K	5%	1/10W
R3253	1-216-045-00	RES-CHIP (KV-XS29N90)	680	5%	1/10W
R3254	1-216-073-00	RES-CHIP (KV-XS29N90)	10K	5%	1/10W
R3255	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W
R3256	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W
R3257	1-216-097-91	RES-CHIP (KV-XS29N90)	100K	5%	1/10W
R3258	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W
R3259	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K	5%	1/10W
R3260	1-216-025-91	RES-CHIP	100	5%	1/10W
R3261	1-216-025-91	RES-CHIP	100	5%	1/10W
R3262	1-216-115-00	RES-CHIP (KV-XS29N90)	560K	5%	1/10W
R3262	1-216-101-00	RES-CHIP (KV-XS29N93)	150K	5%	1/10W
R3263	1-216-093-91	RES-CHIP	68K	5%	1/10W
R3264	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R3266	1-216-295-91	SHORT	0		
R3267	1-216-049-91	RES-CHIP	1K	5%	1/10W
R3268	1-216-049-91	RES-CHIP	1K	5%	1/10W
R3269	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3270	1-216-295-91	SHORT	0		
R3271	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3272	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3273	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3274	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3275	1-216-295-91	SHORT	0 (KV-XS29N93)		
R3276	1-216-295-91	SHORT	0 (KV-XS29N93)		
R3277	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3278	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K	5%	1/10W
R3278	1-216-081-00	RES-CHIP (KV-XS29N93)	22K	5%	1/10W
R3279	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K	5%	1/10W
R3279	1-216-081-00	RES-CHIP (KV-XS29N93)	22K	5%	1/10W
R3280	1-216-033-00	RES-CHIP	220	5%	1/10W
R3281	1-216-033-00	RES-CHIP	220	5%	1/10W
R3282	1-216-079-00	RES-CHIP	18K	5%	1/10W
R3283	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3284	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3285	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3286	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3287	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3288	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3289	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3290	1-216-081-00	RES-CHIP	22K	5%	1/10W
R3291	1-216-079-00	RES-CHIP	18K	5%	1/10W
R3294	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3295	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R3296	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R3297	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3298	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R3299	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R6200	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R6201	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6202	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6203	1-216-295-91	SHORT	0		
R6205	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W
R6207	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R6209	1-216-049-91	RES-CHIP	1K	5%	1/10W
R6213	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6214	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6219	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6235	1-216-029-00	RES-CHIP (KV-XS29N93)	150	5%	1/10W
R6236	1-216-075-00	RES-CHIP (KV-XS29N93)	12K	5%	1/10W
R6237	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R6239	1-216-053-00	RES-CHIP (KV-XS29N93)	1.5K	5%	1/10W
R6240	1-249-429-11	CARBON (KV-XS29N93)	10K	5%	1/4W
R6241	1-215-890-11	METAL OXIDE (KV-XS29N93)	470	5%	2W
R6242	1-215-890-11	METAL OXIDE (KV-XS29N93)	470	5%	2W
R6243	1-249-392-11	CARBON (KV-XS29N93)	8.2	5%	1/4W
R6244	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W
R6245	1-216-053-00	RES-CHIP (KV-XS29N90)	1.5K	5%	1/10W
R6245	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R6246	1-216-053-00	RES-CHIP (KV-XS29N90)	1.5K	5%	1/10W
R6246	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R6248	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R6249	1-216-057-00	RES-CHIP (KV-XS29N93)	2.2K	5%	1/10W
R6250	1-216-295-91	SHORT	0 (KV-XS29N93)		
R6251	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W

B3 B5

REF. NO.	PART NO.	DESCRIPTION			REMARK
R6252	1-216-097-91	RES-CHIP (KV-XS29N93)	100K	5%	1/10W
R6253	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R6254	1-216-295-91	SHORT	0 (KV-XS29N93)		
R6255	1-216-308-00	RES-CHIP (KV-XS29N93)	4.7	5%	1/10W
R6256	1-216-065-91	RES-CHIP (KV-XS29N93)	4.7K	5%	1/10W
R6257	1-216-061-00	RES-CHIP (KV-XS29N93)	3.3K	5%	1/10W
R6254	1-216-001-00	RES-CHIP	10	5%	1/10W
R6255	1-216-308-00	RES-CHIP	4.7	5%	1/10W
R6258	1-216-001-00	RES-CHIP	10	5%	1/10W
R6259	1-216-308-00	RES-CHIP	4.7	5%	1/10W
R6260	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W
R6262	1-216-055-00	RES-CHIP (KV-XS29N93)	1.8K	5%	1/10W
R6263	1-216-055-00	RES-CHIP (KV-XS29N93)	1.8K	5%	1/10W
R6266	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W
R6268	1-216-065-91	RES-CHIP (KV-XS29N93)	4.7K	5%	1/10W
R6278	1-216-295-91	SHORT	0		

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*	A-1131-506-A	B5 BOARD MOUNTED (KV-XS29N90)			
*	A-1131-532-A	B5 BOARD MOUNTED (KV-XS29N93)			
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		<CAPACITOR>			
C1515	1-163-243-11	CERAMIC CHIP (KV-XS29N93)	47PF	5.00%	50V
C1517	1-164-005-11	CERAMIC CHIP (KV-XS29N93)	0.47UF		25V
C1518	1-126-967-11	ELECT (KV-XS29N93)	47UF	20.00%	50V
C1519	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1520	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1522	1-164-005-11	CERAMIC CHIP (KV-XS29N93)	0.47UF		25V
C1523	1-163-255-11	CERAMIC CHIP (KV-XS29N93)	150PF	5.00%	50V
C1524	1-163-113-00	CERAMIC CHIP (KV-XS29N93)	68PF	5.00%	50V
C1525	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1526	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1528	1-164-005-11	CERAMIC CHIP (KV-XS29N93)	0.47UF		25V
C1529	1-163-255-11	CERAMIC CHIP (KV-XS29N93)	150PF	5.00%	50V
C1530	1-163-113-00	CERAMIC CHIP (KV-XS29N93)	68PF	5.00%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1540	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C1541	1-126-967-11	ELECT	47UF	20.00%	50V
C1542	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C1543	1-126-933-11	ELECT	100UF	20.00%	16V
C1544	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C1554	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C1571	1-163-263-11	CERAMIC CHIP	330PF	5.00%	50V
C1572	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1574	1-216-295-91	SHORT	0		
C1575	1-163-239-11	CERAMIC CHIP	33PF	5.00%	50V
C1576	1-104-661-91	ELECT	330UF	20.00%	16V
C1577	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C1578	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C5801	1-164-005-11	CERAMIC CHIP	0.47UF		25V
C5802	1-165-319-11	CERAMIC CHIP	0.1UF		50V
C5803	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C5804	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C5805	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C5806	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C5808	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C5810	1-163-249-11	CERAMIC CHIP	82PF	5.00%	50V
C5811	1-126-934-11	ELECT	220UF	20.00%	16V
C5813	1-126-964-11	ELECT	10UF	20.00%	50V
C5817	1-104-664-11	ELECT	47UF	20.00%	16V
C5818	1-126-933-11	ELECT	100UF	20.00%	16V
C5820	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V

<CONNECTOR>

CN1501*	1-564-511-11	PLUG, CONNECTOR 8P (KV-XS29N93)	
CN1502*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)	
CN1503	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P	
CN1504	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P	
CN5800*	1-564-506-11	PLUG, CONNECTOR 3P	

<DIODE>

D1501	8-719-069-60	DIODE UDZS-TE17-9.1B (KV-XS29N93)

<IC>

IC1501	8-752-058-68	IC CXA1315M-T4
IC1502	8-759-439-64	IC HEF4053BT (KV-XS29N93)

<CHIP CONDUCTOR>

JR5800	1-216-295-91	SHORT	0 (KV-XS29N90)
JR5801	1-216-295-91	SHORT	0 (KV-XS29N90)
JR5802	1-216-295-91	SHORT	0

<COIL>

L1501	1-414-856-11	INDUCTOR	10UH
L1502	1-414-856-11	INDUCTOR	10UH
L1506	1-414-857-11	INDUCTOR	100UH (KV-XS29N93)
L1507	1-414-187-11	INDUCTOR	47UH (KV-XS29N93)
L1508	1-414-187-11	INDUCTOR	47UH (KV-XS29N93)

B5

REF. NO.	PART NO.	DESCRIPTION	REMARK
L1509	1-414-857-11	INDUCTOR 100UH (KV-XS29N93)	
L1510	1-414-187-11	INDUCTOR 47UH (KV-XS29N93)	
L1511	1-414-187-11	INDUCTOR 47UH (KV-XS29N93)	
L1570	1-410-470-11	INDUCTOR 10UH	
L5800	1-414-856-11	INDUCTOR 10UH	
L5801	1-414-856-11	INDUCTOR 10UH	
L5802	1-414-189-31	INDUCTOR 100UH	
L5803	1-414-188-41	INDUCTOR 68UH	
L5804	1-414-856-11	INDUCTOR 10UH	
L5806	1-414-189-31	INDUCTOR 100UH	
		<TRANSISTOR>	
Q1501	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1502	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L (KV-XS29N93)	
Q1503	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1505	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1507	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L (KV-XS29N93)	
Q1509	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1510	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1511	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L (KV-XS29N93)	
Q1514	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1515	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1516	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L (KV-XS29N93)	
Q1520	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1522	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)	
Q1523	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L (KV-XS29N93)	
Q1571	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q1572	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q1573	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	
Q1574	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q1575	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	
Q1576	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	
Q1577	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	
Q5801	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	
Q5802	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5803	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	
Q5804	8-729-421-19	TRANSISTOR UN2213-TX	
Q5805	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5806	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5807	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5808	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5809	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5810	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5811	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5812	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5813	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5814	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	
Q5815	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5816	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5817	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5818	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5819	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q5820	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R1506	1-216-025-91	RES-CHIP (KV-XS29N93)	100	5%	1/10W
R1507	1-216-081-00	RES-CHIP (KV-XS29N93)	22K	5%	1/10W
R1508	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W
R1511	1-216-033-00	RES-CHIP (KV-XS29N93)	220	5%	1/10W
R1512	1-216-005-00	RES-CHIP (KV-XS29N93)	15	5%	1/10W
R1515	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1516	1-216-025-91	RES-CHIP (KV-XS29N93)	100	5%	1/10W
R1517	1-216-075-00	RES-CHIP (KV-XS29N93)	12K	5%	1/10W
R1520	1-216-079-00	RES-CHIP (KV-XS29N93)	18K	5%	1/10W
R1522	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1523	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1528	1-216-033-00	RES-CHIP (KV-XS29N93)	220	5%	1/10W
R1529	1-216-053-00	RES-CHIP (KV-XS29N93)	1.5K	5%	1/10W
R1531	1-216-045-00	RES-CHIP (KV-XS29N93)	680	5%	1/10W
R1537	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1538	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1540	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1541	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1542	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1543	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1545	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1547	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1548	1-216-025-91	RES-CHIP (KV-XS29N93)	100	5%	1/10W
R1549	1-216-075-00	RES-CHIP (KV-XS29N93)	12K	5%	1/10W
R1551	1-216-081-00	RES-CHIP (KV-XS29N93)	22K	5%	1/10W
R1552	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1553	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1554	1-216-033-00	RES-CHIP (KV-XS29N93)	220	5%	1/10W
R1556	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1559	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W

B5 B7

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1560	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1561	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1562	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1563	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1566	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1567	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1568	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W
R1569	1-216-049-91	RES-CHIP (KV-XS29N93)	1K	5%	1/10W
R1570	1-216-021-00	RES-CHIP	68	5%	1/10W
R1571	1-216-645-11	METAL CHIP	560	0.5%	1/10W
R1572	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1573	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1574	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R1575	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1577	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1578	1-216-033-00	RES-CHIP	220	5%	1/10W
R1579	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1580	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1581	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R1582	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R1583	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R1584	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R1585	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R1586	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R1589	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1590	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1591	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1592	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1593	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1594	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1595	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1596	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1598	1-216-025-91	RES-CHIP	100	5%	1/10W
R1599	1-216-025-91	RES-CHIP	100	5%	1/10W
R5801	1-216-025-91	RES-CHIP	100	5%	1/10W
R5803	1-216-033-00	RES-CHIP	220	5%	1/10W
R5804	1-216-295-91	SHORT	0		
R5805	1-216-027-00	RES-CHIP	120	5%	1/10W
R5806	1-216-041-00	RES-CHIP	470	5%	1/10W
R5807	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5808	1-216-043-91	RES-CHIP	560	5%	1/10W
R5809	1-216-025-91	RES-CHIP	100	5%	1/10W
R5810	1-216-077-91	RES-CHIP	15K	5%	1/10W
R5811	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5812	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5813	1-216-073-00	RES-CHIP	10K	5%	1/10W
R5814	1-216-689-11	RES-CHIP	39K	5%	1/10W
R5815	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5816	1-216-025-91	RES-CHIP	100	5%	1/10W
R5817	1-216-085-00	RES-CHIP	33K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5818	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5819	1-216-041-00	RES-CHIP	470	5%	1/10W
R5820	1-216-041-00	RES-CHIP	470	5%	1/10W
R5821	1-216-041-00	RES-CHIP	470	5%	1/10W
R5822	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5823	1-216-085-00	RES-CHIP	33K	5%	1/10W
R5824	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5825	1-216-041-00	RES-CHIP	470	5%	1/10W
R5826	1-216-041-00	RES-CHIP	470	5%	1/10W
R5827	1-216-041-00	RES-CHIP	470	5%	1/10W
R5829	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5830	1-216-041-00	RES-CHIP	470	5%	1/10W
R5831	1-216-041-00	RES-CHIP	470	5%	1/10W
R5832	1-216-041-00	RES-CHIP	470	5%	1/10W
R5833	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5834	1-216-085-00	RES-CHIP	33K	5%	1/10W
R5835	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5836	1-216-041-00	RES-CHIP	470	5%	1/10W
R5837	1-216-033-00	RES-CHIP	220	5%	1/10W
R5838	1-216-039-00	RES-CHIP	390	5%	1/10W
R5839	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5840	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5841	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5842	1-216-081-00	RES-CHIP	22K	5%	1/10W
R5843	1-216-033-00	RES-CHIP	220	5%	1/10W
R5844	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R5845	1-216-041-00	RES-CHIP	470	5%	1/10W
R5846	1-216-025-91	RES-CHIP	100	5%	1/10W
R5847	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5848	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5849	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5850	1-216-049-91	RES-CHIP	1K	5%	1/10W
R5851	1-216-049-91	RES-CHIP	1K	5%	1/10W

****

* A-1131-500-A B7 BOARD MOUNTED
****

<CAPACITOR>

C2301	1-126-933-11	ELECT	100UF	20.00%	16V
C2302	1-126-964-11	ELECT	10UF	20.00%	50V
C2303	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C2304	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C2305	1-136-165-00	MYLAR	0.1UF	5.00%	50V
C2306	1-126-964-11	ELECT	10UF	20.00%	50V
C2308	1-130-483-00	MYLAR	0.01UF	5.00%	50V
C2312	1-101-004-00	CERAMIC	0.01UF		50V
C2313	1-126-964-11	ELECT	10UF	20.00%	50V

<CONNECTOR>

CN2300 *	1-766-952-11	CONNECTOR, BOARD TO BOARD 11P

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

B7 **C**

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<FERRITE BEAD>			
FB2300	1-410-397-21	FERRITE	1.1UH		
		<IC>			
IC2300	8-759-639-32	IC TDA9181			
		<COIL>			
L2300	1-414-189-31	INDUCTOR	100UH		
L2301	1-414-189-31	INDUCTOR	100UH		
		<TRANSISTOR>			
Q2304	8-729-030-02	TRANSISTOR DTC144ES-TP			
Q2305	8-729-119-78	TRANSISTOR 2SC2785TP-HFE			
Q2306	8-729-119-76	TRANSISTOR 2SA1175TP-HFE			
		<RESISTOR>			
R2310	1-136-165-00	MYLAR	0.1UF	5.00% 50V	
R2312	1-249-425-11	CARBON	4.7K	5% 1/4W	
R2313	1-249-413-11	CARBON	470	5% 1/4W	
R2314	1-249-407-11	CARBON	150	5% 1/4W	
R2315	1-249-417-11	CARBON	1K	5% 1/4W	
R2316	1-259-884-11	CARBON	4.7M	5% 1/4W	
R2317	1-259-884-11	CARBON	4.7M	5% 1/4W	
**********					
*	A-1331-999-A	C BOARD MOUNTED			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C700	1-110-389-11	FILM MELF	0.1UF	5% 250V	
C701	1-162-114-00	CERAMIC	0.0047UF	2KV	
C702	1-102-074-00	CERAMIC	0.001UF	10.00% 50V	
C707	1-137-399-11	MYLAR	0.1UF	5.00% 50V	
C708	1-102-228-00	CERAMIC	470PF	10.00% 500V	
C709	1-102-228-00	CERAMIC	470PF	10.00% 500V	
C710	1-102-960-00	CERAMIC	24PF	5.00% 50V	
C711	1-102-852-91	CERAMIC	47PF	5.00% 50V	
C712	1-102-525-11	CERAMIC	68PF	5.00% 50V	
C713	1-102-228-00	CERAMIC	470PF	10.00% 500V	
C716	1-104-665-11	ELECT	100UF	20.00% 25V	
C717	1-107-651-11	ELECT	4.7UF	20.00% 250V	
C726	1-104-664-11	ELECT	47UF	20.00% 25V	
C1800	1-126-964-11	ELECT	10UF	20.00% 50V	
C1803	1-126-964-11	ELECT	10UF	20.00% 50V	
C1804	1-126-964-11	ELECT	10UF	20.00% 50V	
C1809	1-126-942-61	ELECT	1000UF	20.00% 25V	

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<CONNECTOR>			
CN700	1-695-915-11	TAB (CONTACT)			
CN701	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			
CN702	1-695-915-11	TAB (CONTACT)			
CN703 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN704	1-695-915-11	TAB (CONTACT)			
CN706	1-695-915-11	TAB (CONTACT)			
CN1801 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN1802 *	1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D702	8-719-911-19	DIODE 1SS119-25TD			
D703	8-719-911-19	DIODE 1SS119-25TD			
D704	8-719-911-19	DIODE 1SS119-25TD			
D705	8-719-051-85	DIODE HSS83TD			
D706	8-719-051-85	DIODE HSS83TD			
D707	8-719-051-85	DIODE HSS83TD			
D708	8-719-911-19	DIODE 1SS119-25TD			
D709	8-719-911-19	DIODE 1SS119-25TD			
D710	8-719-911-19	DIODE 1SS119-25TD			
D711	8-719-110-23	DIODE RD11ES-T1B3			
D720	8-719-911-19	DIODE 1SS119-25TD			
D721	8-719-911-19	DIODE 1SS119-25TD			
D722	8-719-911-19	DIODE 1SS119-25TD			
D1803	8-719-911-19	DIODE 1SS119-25TD			
D1804	8-719-911-19	DIODE 1SS119-25TD			
D1808	8-719-908-03	DIODE GP08DPKG23			
		<IC>			
IC701	8-759-561-28	IC STV5112			
IC1800	8-759-822-38	IC LA6510			
		<JACK>			
J701 ⚠	1-540-071-22	SOCKET, CRT			
		<COIL>			
L701	1-410-667-31	INDUCTOR	22UH		
L705	1-414-186-31	INDUCTOR	33UH		
L706	1-414-186-31	INDUCTOR	33UH		
L707	1-414-186-31	INDUCTOR	33UH		
		<TRANSISTOR>			
Q1800	8-729-119-76	TRANSISTOR 2SA1175TP-HFE			
Q1802	8-729-119-78	TRANSISTOR 2SC2785TP-HFE			
		<RESISTOR>			
R700	1-249-393-11	CARBON	10	5% 1/4W	
R701	1-249-496-11	CARBON	100K	5% 1/2W	
R702	1-215-469-00	METAL	100K	1% 1/4W	
R703	1-215-414-00	METAL	510	1% 1/4W	
R704	1-215-414-00	METAL	510	1% 1/4W	

C D3

REF. NO.	PART NO.	DESCRIPTION			REMARK
R705	1-249-418-11	CARBON	1.2K	5%	1/4W
R706	1-249-418-11	CARBON	1.2K	5%	1/4W
R707	1-215-414-00	METAL	510	1%	1/4W
R708	1-249-418-11	CARBON	1.2K	5%	1/4W
R709	1-215-903-11	METAL OXIDE	68K	5%	2W
R711	1-215-903-11	METAL OXIDE	68K	5%	2W
R712	1-215-903-11	METAL OXIDE	68K	5%	2W
R713	1-215-467-00	METAL	82K	1%	1/4W
R714	1-249-425-11	CARBON	4.7K	5%	1/4W
R715	1-249-413-11	CARBON	470	5%	1/4W
R716	1-249-413-11	CARBON	470	5%	1/4W
R717	1-249-425-11	CARBON	4.7K	5%	1/4W
R718	1-247-752-11	CARBON	1K	5%	1/2W
R719	1-249-425-11	CARBON	4.7K	5%	1/4W
R722	1-247-752-11	CARBON	1K	5%	1/2W
R723	1-249-413-11	CARBON	470	5%	1/4W
R724	1-247-752-11	CARBON	1K	5%	1/2W
R730	1-216-392-11	METAL OXIDE	1.8	5%	3W
R734	1-247-739-11	CARBON	100	5%	1/2W
R744	1-215-415-00	METAL	560	1%	1/4W
R745	1-215-410-00	METAL	360	1%	1/4W
R1800	1-249-417-11	CARBON	1K	5%	1/4W
R1801	1-249-426-11	CARBON	5.6K	5%	1/4W
R1802	1-249-387-11	CARBON	3.3	5%	1/4W
R1803	1-249-387-11	CARBON	3.3	5%	1/4W
R1805	1-249-429-11	CARBON	10K	5%	1/4W
R1806	1-249-425-11	CARBON	4.7K	5%	1/4W
R1808	1-249-425-11	CARBON	4.7K	5%	1/4W
R1809	1-249-435-11	CARBON	33K	5%	1/4W
R1810	1-249-435-11	CARBON	33K	5%	1/4W
R1811	1-249-435-11	CARBON	33K	5%	1/4W
R1812	1-249-435-11	CARBON	33K	5%	1/4W
R1821	1-249-435-11	CARBON	33K	5%	1/4W
R1822	1-249-435-11	CARBON	33K	5%	1/4W
R1823	1-249-426-11	CARBON	5.6K	5%	1/4W
R1824	1-249-435-11	CARBON	33K	5%	1/4W
R1825	1-247-843-11	CARBON	3.3K	5%	1/4W

<VARIABLE RESISTOR>

RV702	1-241-656-11	RES, ADJ, METAL FILM 110M
RV1801	1-223-241-11	RES, ADJ, CARBON 47K

<SPARK GAP>

SG701	1-519-422-11	GAP, SPARK

****

* A-1343-745-A D3 BOARD MOUNTED
****

<CAPACITOR>

C2800	1-104-664-11	ELECT	47UF	20.00%	25V
C2801	1-106-220-00	MYLAR	0.1UF	10.00%	100V
C2802	1-136-155-00	MYLAR	0.015UF	5.00%	50V
C2803	1-129-723-00	FILM	0.056UF	5.00%	630V
C2805	1-104-664-11	ELECT	47UF	20.00%	25V
C2806	1-106-383-00	MYLAR	0.047UF	5.00%	100V
C2807	1-137-194-81	MYLAR	0.47UF	5.00%	50V
C2808	1-126-964-11	ELECT	10UF	20.00%	50V
C2809	1-137-194-81	MYLAR	0.47UF	5.00%	50V
C2810	1-106-375-12	MYLAR	0.022UF	10.00%	250V
C2811	1-126-964-11	ELECT	10UF	20.00%	50V
C2812	1-126-964-11	ELECT	10UF	20.00%	50V
C2813	1-129-708-61	FILM	0.0033UF	5.00%	630V

<CONNECTOR>

CN2800*	1-564-510-11	PLUG, CONNECTOR 7P
CN2802*	1-564-506-11	PLUG, CONNECTOR 3P
CN2803	1-695-915-11	TAB (CONTACT)

<DIODE>

D2800	8-719-302-43	DIODE RGP10GPKG23
D2801	8-719-911-19	DIODE 1SS119-25TD
D2802	8-719-911-19	DIODE 1SS119-25TD
D2803	8-719-911-19	DIODE 1SS119-25TD

<IC>

IC2800	8-759-701-59	IC NJM78M09FA
IC2801	8-759-998-98	IC LM358DR

<COIL>

L2800	1-406-989-71	INDUCTOR	0UH
L2802	1-406-987-21	INDUCTOR	4.7MH
L2803	1-406-986-21	INDUCTOR	3.3UH
L2804	1-406-678-11	INDUCTOR	15MH

<TRANSISTOR>

Q2800	8-729-119-78	TRANSISTOR 2SC2785TP-HFE
Q2801	8-729-195-82	TRANSISTOR 2SC2958-K
Q2802	8-729-017-06	TRANSISTOR 2SC4793
Q2803	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L
Q2804	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L

<RESISTOR>

R2800	1-249-405-11	CARBON	100	5%	1/4W
R2802	1-260-111-11	CARBON	10K	5%	1/2W
R2803	1-260-111-11	CARBON	10K	5%	1/2W
R2804	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R2805	1-216-097-91	RES-CHIP	100K	5%	1/10W
R2806	1-249-421-11	CARBON	2.2K	5%	1/4W
R2807	1-249-420-11	CARBON	1.8K	5%	1/4W
R2808	1-215-857-11	METAL OXIDE	10	5%	1W
R2809	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R2810	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2811	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R2812	1-216-081-00	RES-CHIP	22K	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

D3 **F** **H5**

REF. NO.	PART NO.	DESCRIPTION			REMARK
R2813	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R2814	1-216-121-91	RES-CHIP	1M	5%	1/10W
R2815	1-216-085-00	RES-CHIP	33K	5%	1/10W
R2816	1-216-107-00	RES-CHIP	270K	5%	1/10W
R2817	1-216-107-00	RES-CHIP	270K	5%	1/10W
		<TRANSFORMER>			
T2800	1-413-059-00	TRANSFORMER, FERRITE (DFT)			
**********					
*	A-1241-384-A	F BOARD MOUNTED			
		**********			
	1-533-223-11	CLIP, FUSE			
		<CAPACITOR>			
C654	1-117-703-11	CERAMIC	0.0047UF	99%	250V
C4601 ⚠	1-104-708-11	MYLAR	0.47UF	20.00%	250V
C4602 ⚠	1-109-835-11	MYLAR	0.68UF	20.00%	250V
		<CONNECTOR>			
CN4601*	1-580-843-11	PIN, CONNECTOR (POWER)			
CN4602*	1-580-843-11	PIN, CONNECTOR (POWER)			
CN4603	1-695-915-11	TAB (CONTACT)			
		<FUSE>			
F4601 ⚠	1-532-299-00	FUSE, TIME-LAG 5A/250V			
		<RESISTOR>			
R4601 ⚠	1-202-719-00	SOLID	1M	10%	1/2W
		<TRANSFORMER>			
T4601	1-431-536-11	TRANSFORMER, LINE FILTER			
T4602	1-431-182-11	TRANSFORMER, LINE FILTER			
		<VARISTOR>			
VDR461	1-801-451-11	VARISTOR TNR14V271K660			
VDR461*	4-374-846-01	COVER, CAPACITOR, CAP TYPE			
**********					

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1372-755-A	H5 BOARD MOUNTED (KV-XS29N90)			
*	A-1372-756-A	H5 BOARD MOUNTED (KV-XS29N93)			
		**********			
*	4-055-304-01	HOLDER, LED			
		<CAPACITOR>			
C3900	1-136-153-00	MYLAR	0.01UF	5.00%	50V
C3902	1-136-153-00	MYLAR	0.01UF	5.00%	50V
C3904	1-104-664-11	ELECT	47UF	20.00%	25V
C3905	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3906	1-126-963-11	ELECT	4.7UF	20.00%	50V
C3907	1-136-177-00	MYLAR (KV-XS29N93)	1UF	5.00%	50V
C3910	1-104-664-11	ELECT	47UF	20.00%	16V
C3911	1-104-664-11	ELECT	47UF	20.00%	16V
C3912	1-102-114-00	CERAMIC	470PF	10.00%	50V
C3913	1-126-960-11	ELECT	1UF	20.00%	50V
C3914	1-126-965-11	ELECT (KV-XS29N90)	22UF	20.00%	50V
C3914	1-126-933-11	ELECT (KV-XS29N93)	100UF	20.00%	16V
		<CONNECTOR>			
CN3601*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3602*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3901*	1-564-507-11	PLUG, CONNECTOR 4P			
CN3902*	1-564-509-11	PLUG, CONNECTOR 6P			
CN3903*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)			
CN3904*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3905*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3906*	1-564-506-11	PLUG, CONNECTOR 3P (KV-XS29N93)			
		<DIODE>			
D3900	8-719-069-60	DIODE UDZS-TE17-9.1B			
D3901	8-719-069-60	DIODE UDZS-TE17-9.1B			
D3902	8-719-069-60	DIODE UDZS-TE17-9.1B			
D3905	8-719-069-60	DIODE UDZS-TE17-9.1B			
D3906	8-719-045-19	DIODE SPB-26MVWF			
D3907	8-719-069-60	DIODE UDZS-TE17-9.1B			
D3908	8-719-069-60	DIODE UDZS-TE17-9.1B			
		<IC>			
IC3901	8-759-180-30	HYB IC SBX3081-51(30)			
		<JACK>			
J3901	1-750-264-11	JACK			
J3902	1-784-646-11	TERMINAL, S			
J3903	1-770-329-11	JACK, PIN 3P			

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

H5 **J4 (KV-XS29N93)** **VM**

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<COIL>			
L3901	1-414-183-41	INDUCTOR	10UH		
L3902	1-414-183-41	INDUCTOR	10UH		
L3903	1-416-966-11	INDUCTOR	30UH (KV-XS29N93)		
		<TRANSISTOR>			
Q3901	8-729-030-02	TRANSISTOR DTC144ESA-TP			
Q3902	8-729-030-02	TRANSISTOR DTC144ESA-TP			
		<RESISTOR>			
R3900	1-249-411-11	CARBON	330	5%	1/4W
R3901	1-249-411-11	CARBON	330	5%	1/4W
R3902	1-247-804-11	CARBON	75	5%	1/4W
R3904	1-249-429-11	CARBON	10K	5%	1/4W
R3905	1-249-429-11	CARBON	10K	5%	1/4W
R3907	1-249-426-11	CARBON	5.6K	5%	1/4W
R3908	1-249-413-11	CARBON	470	5%	1/4W
R3909	1-249-417-11	CARBON	1K	5%	1/4W
R3910	1-249-420-11	CARBON	1.8K	5%	1/4W
R3911	1-249-411-11	CARBON	330	5%	1/4W
R3912	1-247-843-11	CARBON	3.3K	5%	1/4W
R3913	1-249-429-11	CARBON	10K	5%	1/4W
R3914	1-249-411-11	CARBON	330	5%	1/4W
R3915	1-249-429-11	CARBON	10K	5%	1/4W
R3916	1-249-401-11	CARBON	47	5%	1/4W
R3917	1-247-804-11	CARBON	75	5%	1/4W
R3918	1-247-815-91	CARBON	220	5%	1/4W
R3919	1-247-815-91	CARBON	220	5%	1/4W
R3920	1-247-807-31	CARBON	100	5%	1/4W
R3921	1-247-807-31	CARBON	100	5%	1/4W
R3922	1-249-421-11	CARBON	2.2K	5%	1/4W
R3923	1-247-815-91	CARBON	220	5%	1/4W
R3924	1-247-804-11	CARBON	75	5%	1/4W
		<SWITCH>			
S3601 ⚠	1-571-433-21	SWITCH, PUSH (AC POWER)			
S3902	1-692-431-21	SWITCH, TACTILE			
S3903	1-692-431-21	SWITCH, TACTILE			
S3904	1-692-431-21	SWITCH, TACTILE			
S3905	1-692-431-21	SWITCH, TACTILE			
S3906	1-692-431-21	SWITCH, TACTILE			
S3907	1-692-431-21	SWITCH, TACTILE			
S3908	1-692-431-21	SWITCH, TACTILE			

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* A-1388-266-A J4 BOARD MOUNTED (KV-XS29N93 ONLY)
****

<CAPACITOR>

C2410	1-126-967-11	ELECT	47UF	20.00%	50V
C2411	1-126-967-11	ELECT	47UF	20.00%	50V
C2412	1-126-967-11	ELECT	47UF	20.00%	50V
C2413	1-102-112-00	CERAMIC	330PF	10.00%	50V
C2414	1-102-112-00	CERAMIC	330PF	10.00%	50V
C2418	1-126-960-11	ELECT	1UF	20.00%	50V
C2419	1-126-960-11	ELECT	1UF	20.00%	50V

<CONNECTOR>

CN2410 *	1-564-523-11	PLUG, CONNECTOR 8P
CN3451 *	1-564-518-11	PLUG, CONNECTOR 3P

<DIODE>

D2410	8-719-121-26	DIODE RD9.1ES-T1B
D2411	8-719-121-26	DIODE RD9.1ES-T1B
D2412	8-719-121-26	DIODE RD9.1ES-T1B
D2414	8-719-121-26	DIODE RD9.1ES-T1B
D2415	8-719-121-26	DIODE RD9.1ES-T1B
D3453	8-719-110-72	DIODE RD30ES-T1B2
D3454	8-719-110-72	DIODE RD30ES-T1B2

<JACK>

J2410	1-784-623-11	BLOCK, PIN JACK 5P
J3451	1-694-467-11	TERMINAL, PUSH (2P)

<RESISTOR>

R2410	1-247-804-11	CARBON	75	5%	1/4W
R2411	1-247-804-11	CARBON	75	5%	1/4W
R2412	1-247-804-11	CARBON	75	5%	1/4W
R2414	1-247-887-00	CARBON	220K	5%	1/4W
R2415	1-247-807-31	CARBON	100	5%	1/4W
R2417	1-247-887-00	CARBON	220K	5%	1/4W
R2418	1-247-807-31	CARBON	100	5%	1/4W
R2419	1-247-815-91	CARBON	220	5%	1/4W
R2420	1-247-815-91	CARBON	220	5%	1/4W
R2421	1-247-815-91	CARBON	220	5%	1/4W

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* A-1342-530-A VM BOARD MOUNTED
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4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C5900	1-102-115-00	CERAMIC	560PF	10.00%	50V
C5902	1-104-661-91	ELECT	330UF	20.00%	16V
C5903	1-161-830-00	CERAMIC	0.0047UF		500V
C5905	1-126-925-11	ELECT	470UF	20.00%	10V
C5906	1-130-491-00	MYLAR	0.047UF	5.00%	50V
C5907	1-107-638-11	ELECT	33UF	20.00%	160V
C5908	1-106-383-00	MYLAR	0.047UF	10.00%	200V
C5909	1-126-933-11	ELECT	100UF	20.00%	16V
C5910	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C5911	1-107-949-11	ELECT	2.2UF	20.00%	160V

VM

REF. NO.	PART NO.	DESCRIPTION			REMARK
C5912	1-104-999-11	MYLAR	0.1UF	10.00%	200V
C5913	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C5914	1-126-933-11	ELECT	100UF	20.00%	16V
C5916	1-130-491-00	MYLAR	0.047UF	5.00%	50V
C5917	1-126-925-11	ELECT	470UF	20.00%	10V
C5918	1-102-244-00	CERAMIC	220PF	10.00%	500V
C5919	1-136-165-00	MYLAR	0.1UF	5.00%	50V
		<CONNECTOR>			
CN2801 *	1-564-506-11	PLUG, CONNECTOR 3P			
CN5901 *	1-564-510-11	PLUG, CONNECTOR 7P			
CN5904 *	1-770-723-11	CONNECTOR, BOARD TO BOARD 8P			
		<DIODE>			
D5901	8-719-911-19	DIODE 1SS119-25TD			
D5902	8-719-110-88	DIODE MTZJ-T-77-39			
D5903	8-719-911-19	DIODE 1SS119-25TD			
D5904	8-719-110-88	DIODE MTZJ-T-77-39			
D5905	8-719-911-19	DIODE 1SS119-25TD			
D5906	1-249-406-11	CARBON	120	5%	1/4W
D5907	1-249-406-11	CARBON	120	5%	1/4W
		<COIL>			
L5901	1-414-187-11	INDUCTOR	47UH		
		<TRANSISTOR>			
Q5901	8-729-230-45	TRANSISTOR 2SC2458TP-YGR			
Q5902	8-729-809-26	TRANSISTOR 2SA1606-E			
Q5903	8-729-230-45	TRANSISTOR 2SC2458TP-YGR			
Q5904	8-729-119-76	TRANSISTOR 2SA1175TP-HFE			
Q5905	8-729-230-45	TRANSISTOR 2SC2458TP-YGR			
Q5906	8-729-809-29	TRANSISTOR 2SC4159-E			
Q5907	8-729-119-78	TRANSISTOR 2SC2785TP-HFE			
		<RESISTOR>			
R5901	1-249-401-11	CARBON	47	5%	1/4W
R5902	1-249-414-11	CARBON	560	5%	1/4W
R5903	1-247-734-11	CARBON	39	5%	1/2W
R5904	1-249-411-11	CARBON	330	5%	1/4W
R5905	1-249-417-11	CARBON	1K	5%	1/4W
R5906	1-249-417-11	CARBON	1K	5%	1/4W
R5907	1-249-417-11	CARBON	1K	5%	1/4W
R5908	1-249-383-11	CARBON	1.5	5%	1/4W
R5909	1-247-815-91	CARBON	220	5%	1/4W
R5910	1-249-403-11	CARBON	68	5%	1/4W
R5911	1-249-439-11	CARBON	68K	5%	1/4W
R5912	1-249-437-11	CARBON	47K	5%	1/4W
R5914	1-249-403-11	CARBON	68	5%	1/4W
R5915	1-249-429-11	CARBON	10K	5%	1/4W
R5916	1-249-419-11	CARBON	1.5K	5%	1/4W
R5917	1-249-416-11	CARBON	820	5%	1/4W
R5918	1-249-429-11	CARBON	10K	5%	1/4W
R5919	1-249-417-11	CARBON	1K	5%	1/4W
R5920	1-249-439-11	CARBON	68K	5%	1/4W
R5921	1-216-476-11	METAL OXIDE	180	5%	3W
R5922	1-249-414-11	CARBON	560	5%	1/4W
R5923	1-249-383-11	CARBON	1.5	5%	1/4W
R5925	1-249-400-11	CARBON	39	5%	1/4W
R5927	1-249-416-11	CARBON	820	5%	1/4W
R5929	1-215-880-00	METAL OXIDE	10	5%	2W

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MISCELLANEOUS
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	1-419-519-11	COIL, DEMAGNETIC
	1-452-094-00	CIRCULAR DISC MAGNET B
	1-452-032-00	MAGNET,DISC
	1-452-896-11	COIL, NA ROTATION (RT200)
	1-529-172-11	SPEAKER, LOUD (10CM)
	1-529-190-11	SPEAKER (5CM)
	1-529-563-11	SPEAKER (15X6.5CM)
	1-573-657-21	PLUG, F-PIN
	1-575-023-11	CORD, POWER (WITH CONNECTOR) 6A/250V
	8-453-011-11	NA299-M
	8-451-494-31	DEFELECTION YOKE (Y29RSA-S)
	8-735-057-05	PICTURE TUBE (M68LNH070X)

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ACCESSORIES AND PACKING MATERIALS
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	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)
*	4-029-168-01	BAG, PROTECTION
*	4-054-319-01	TRAY
	4-065-210-01	JOINT
*	4-071-224-01	CUSHION (LOWER)(ASSY)
*	4-071-225-01	CUSHION (UPPER)(ASSY)
*	4-076-373-01	INDIVIDUAL CARTON
	4-076-374-11	MANUAL, INSTRUCTION
	4-392-003-11	BAND, HOLD
	4-392-004-11	CLIP

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REMOTE COMMANDER
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	1-418-460-11	REMOTE COMMANDER (RM-914)
	9-933-895-01	BATTERY COVER, REMOTE COMMANDER

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